UCLA

UCLA Electronic Theses and Dissertations

Title

The Flip Side of the Boomerang Generation: The Role of Childhood Adversity and Social Support on Housing Stress and Independent Living of Millennials in Young Adulthood

Permalink

https://escholarship.org/uc/item/5qx1q1k8

Author

Curry, Susanna

Publication Date

2016

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

The Flip Side of the Boomerang Generation: The Role of Childhood Adversity and Social Support on Housing Stress and Independent Living of Millennials in Young Adulthood

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Social welfare

by

Susanna Curry

2016

© Copyright by

Susanna Curry

ABSTRACT OF THE DISSERTATION

The Flip Side of the Boomerang Generation: The Role of Childhood Adversity and Social Support on Housing Stress and Independent Living of Millennials in Young Adulthood

by

Susanna Curry

Doctor of Philosophy in Social Welfare
University of California, Los Angeles, 2016
Professor Bridget J. Freisthler, Chair

Background and Aims. There currently is a growing understanding of the physical and mental health consequences of childhood adversity, yet much less is known about how childhood adversity relates to adult housing outcomes. Some social supports present in the transition to adulthood may buffer young people from housing challenges. This study examines the relationship between childhood adversity, social support in the transition to adulthood, and housing stress and living arrangements in adulthood.

Methods. This study is based on data from 10,034 individuals from Waves 1, 3, and 4 in-home surveys of the National Longitudinal Study of Adolescent to Adult Health. Weighted binomial and multinomial logistic regressions were used in the analysis. The Holm Bonferroni approach

corrected for multiple comparisons. Lastly, predictive margins were calculated for the full moderation models.

Results. Reporting emotional abuse in childhood was significantly associated with higher likelihood of experiencing housing stress in adulthood (ages 26 - 32) and lower likelihood of living with parents in adulthood, compared to living in one's own place. Compared to those who received less than \$200 from parents in a 12-month period in the transition to adulthood, those who received \$1,000 or more had significantly higher likelihood of living with parents in adulthood. Among those who reported moderate childhood emotional abuse, the likelihood of experiencing housing stress at ages 26 - 32 was higher among those who received financial support from parents at ages 18 - 26. The relationship between reporting childhood emotional abuse and likelihood of living with parents in adulthood was also conditional on parental financial support at ages 18 - 26 such as those who received parental financial support were more likely to live with parents approximately six years later.

Conclusions. This study suggests that the relationship between childhood emotional abuse and housing stress exists above and beyond other forms of childhood adversity. We should consider alternative options for housing for those who report childhood emotional abuse. Findings also provide further evidence that cultivating any kind of supportive relationship with an adult, even a parent, could be a source of resilience for emotionally abused young people in early adulthood.

The dissertation of Susanna Curry is approved.

Laura S. Abrams

Todd M. Franke

Michael C. Lens

Bridget J. Freisthler, Committee Chair

University of California, Los Angeles

2016

DEDICATION

This dissertation is dedicated to my parents, Roy and Sue Curry.

TABLE OF CONTENTS

LIST OF TABLES x - xi
LIST OF FIGURESxii
ACKNOWLEDGMENTSxiii-xv
VITAxvi-xvii
CHAPTER 1: INTRODUCTION
Definition and Prevalence of Homelessness
Definition and Prevalence of Housing Stability
Housing and Homelessness Among Emerging and Young Adults
Home-Leaving Norms Among Emerging Adults
Consequences of Poor Housing Outcomes Among Emerging and Young Adults6
Precipitating Factors for Poor Housing Outcomes
The Importance of Social Relationships
Study Overview and Purpose
Organization of the Current Study
CHAPTER 2: LITERATURE REVIEW12
Measuring Homelessness and Housing Stability
Relationship between Childhood Experiences and Housing Outcomes in Adulthood,,13
Influence of Social Support on Housing Outcomes
Childhood Experiences and Adult Social Support
Defining Young Adulthood in Studies of Homelessness and Housing Instability24
Summary25

CHAPTER 3: CONCEPTUAL FRAMEWORK	28
Stress Process Model, Stress Proliferation, and Conservation of Resources Theor	ry28
Conceptual Framework for the Current Study	37
Research Questions and Hypotheses.	39
CHAPTER 4: METHODS	41
Add Health Study Design	41
Sample	43
Measures	44
Dependent Variables	44
Social Support	45
Childhood Adversity	47
Control Variables	48
Statistical Analysis	57
Analysis Weights	58
Assessment of Attrition and Missing Data.	58
Assessment of Attrition	58
Assessment of Missing Data	59
Analyses to Test Hypotheses.	61
Research Question 1	63
Research Question 2.	64
Research Question 3	65
CHAPTER 5: RESULTS.	66
Research Ouestion 1: Childhood Adversity and Housing Outcomes	66

Bivariate Analyses	66
Childhood Adversity and Housing Stress	67
Childhood Adversity and Living Situation.	72
Research Question 2: Social Support and Housing Outcomes	77
Bivariate Analyses	77
Social Support and Housing Stress	78
Social Support and Living Situation.	82
Research Question 3: Childhood Adversity, Social Support, and Housing Outcomes.	87
Housing Stress on Emotional x Parental Financial Support	87
Living Situation on Emotional Abuse x Parental Financial Support	92
CHAPTER 6: DISCUSSION AND CONCLUSIONS	98
Major Findings	98
Research Question 1	99
Research Question 2.	102
Research Question 3	.105
Strengths and Limitations.	107
Strengths	.106
Limitations	109
Implications for Social Work Practice and Policy.	111
Implications for Practice.	111
Implications for Policy	112
Directions for Future Research.	114
APPENDIX A	116

DEFERENCES	
REFERENCES	- 1/26
INTO POLICIO IN COLORDADA	 1 41

LIST OF TABLES

Table 1.	Wave 4 Sample Demographics (Weighted n = 10,034)	44
Table 2.	Weighted Descriptive Statistics (n = 10,034)	54
Table 3.	Logistic Regression Results for Exclusion from Analytic Sample due to Att	rition
	at Wave 4 (n = 14,310)	58
Table 4.	Logistic Regression Results for Exclusion from Analytic Sample due to Mi	ssing
	Responses (n = 11, 938)	59
Table 5.	Weighted Unadjusted Logistic Regression Models for Main Childhood Adv	ersity
	Independent Variables (n = 10,034)	66
Table 6.	Weighted Logistic Regression for Housing Stress at Wave 4 on Childhood	
	Adversity (n = 10,034)	68
Table 7.	Pairwise Comparisons of Childhood Adversity and Housing Stress in	
	Wave 4	70
Table 8.	Models Testing Living Situation Compared to Living in Own Place, Regres	sed on
	Childhood Adversity (n = 10,034)	74
Table 9.	Pairwise Comparisons of Childhood Adversity and Living Situation in	
	Wave 4	76
Table 10.	Weighted Unadjusted Logistic Regression Models for Main Independent So	ocial
	Support Variables (n = 10,034)	77
Table 11.	Weighted Logistic Regression for Housing Stress at Wave 4 on Social Supp	ort
	(n = 10,034)	79
Table 12.	Pairwise Comparisons of Social Support and Housing Stress in Wave 4	81

Table 13.	Models Testing Living Situation Compared to Living in Own Place, Regressed on
	Social Support (n = 10,034)84
Table 14.	Pairwise Comparisons of Social Support and Living Situation in Wave 487
Table 15.	Housing Stress in Wave 4 Regressed on the Interaction Between Childhood
	Emotional Abuse and Financial Support from Parents in
	Wave 3 (n = 10,034)
Table 16.	Pairwise Comparisons of Interaction Effects of Financial Support and Emotional
	Abuse and Housing Stress in Wave 4
Table 17.	Living Situation in Wave 4 Regressed on the Interaction Between Childhood
	Emotional Abuse and Parental Financial Support in Wave 4 (n = 10,034)93
Table 18.	Comparisons of Significant Interaction Effects of Financial Support and
	Emotional Abuse and Living with Parents (Compared to in Own Place) in
	Wave 496
Table 19.	Housing Stress in Wave 4 Regressed on the Interaction Between Childhood
	Emotional Abuse and Closeness to a Mentor in Wave 3 (n = 10,034)116
Table 20.	Living Situation in Wave 4 Regressed on the Interaction Between Childhood
	Emotional Abuse and Closeness to a Mentor in Wave 3 (n = 10,034)118

LIST OF FIGURES

Figure 1.	Conceptual Model	38
Figure 2.	Study Sample	44
Figure 3.	Predictive Margins of Parental Financial Support x Emotional Abo	use and Housing
	Stress	92
Figure 4.	Predictive Margins for Living with Parents (Compared to in Own	Place) on the
	Interaction of Childhood Emotional Abuse x Parental Financial Su	pport97

ACKNOWLEDGMENTS

This research uses data from the National Study of Adolescent to Adult Health (Add Health), a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Special acknowledgement is due to Ronald R. Rinduss and Barbara Entwisle for assistance in the original design. Persons interested in obtaining Data Files from Add Health should contact Add Health, The University of North Carolina at Chapel Hill, Carolina Population Center, 206 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth_contracts@unc.edu). No direct support was received from grant P01-HD31921 for this analysis.

This dissertation was supported by the following fellowships and grants through the UCLA Luskin School of Public Affairs: the Franklin D. Gilliam, Jr. Social Justice Award, the Luskin Graduate Fellowship Fund, the David and Marianna Fisher Fellowship, and the Bette and Hans Lorenz Endowed Fellowship. I also thank the California Center for Population Research, which provided an excellent workspace and securely housed the Add Health data, and the UCLA Statistical Consulting Group for assistance with decisions regarding statistical methodology.

I have enormous gratitude for my mentors and committee members, particularly Dr.

Bridget Freisthler and Dr. Laura Abrams. Bridget Freisthler has been incredibly supportive chair and provided me many learning opportunities I would not otherwise have had. Thank you,

Bridget for reading countless drafts, for your wise guidance and for pushing me to try new ideas

and approaches. I also thank Laura Abrams, who encouraged me to pursue a career in research. Laura has also provided me many opportunities that have greatly shaped my interests, and it was an honor to work with her for the majority of my doctoral program. Todd Franke was also an excellent resource throughout this process. His expansive knowledge of statistics and quantitative methodology was invaluable. Michael Lens had a keen insight into the "so what?" question, for which I am very grateful.

The stories of many youth I interviewed in previous research projects will remain with me forever and inspire me to better understand and seek effective solutions. Thank you for your willingness to share your experiences.

I also thank my current and previous colleagues here at UCLA, particularly Christina Tam, Charles Lea, Nikki Hozak, Jason Harley, Laura Montero, Gina Lee, Nancy Jo Kepple and Megan Holmes. Christina: what would I do without you? I will be forever grateful for your presence and encouragement through the ups and downs. I also thank the other members of the UCLA Spatial Analysis lab who provided excellent feedback on practice presentations, manuscript ideas, and dissertation findings: Alexis Cooke, Elinam Dellor, Kristina Lovato-Hermann, Jennifer Price-Wolf, Crystal Thomas, and Jenna van Draanen.

I am so grateful to the support of my close friends and loved ones both near and far.

Thank you especially to Eric Harvey, who gave me strength and went above and beyond to provide feedback and talk through ideas. Thank you also to Anna Kane and Caroline Hackett, who were there for me every day from start to finish, and to Stephanie Saunders, Hannah Kim, Jessica Martin, Erin Noren, Elycia Mulholland and Hannah Foehringer Merchant for emotional support along the way. Finally, an enormous thank you to my family: Elly and Brian, thank you for helping me transition to Los Angeles and providing so many forms of support and stress

relief. Andrew and Katie, thank you for your interest in my work and your encouragement.

Thank you to my nephew and my three nieces for the unconditional love and trampoline breaks.

Finally, Mom and Dad, I don't know where to begin to express how grateful I am for your support and encouragement throughout this process—this dissertation is dedicated to you.

VITA

EDUCATION

2009 - 2011 M.S.W., University of California, Los Angeles

2003 – 2007 B.A., Earlham College, Richmond, IN Major: Sociology & Anthropology

PUBLICATIONS

- Tam, C., Freisthler, B., Curry, S.R., & Abrams, L.S. (In Press). Where are the beds? Housing locations for transition-age youth leaving public systems. Accepted January 2016, *Families in Society*.
- **Curry, S.R.**, Rhoades, H., & Rice, E. (2016). Correlates of homeless youths' stability-seeking behaviors online and in person. *Journal of the Society for Social Work and Research*, 7(1), 2334-2315. doi: 10.1086/685107
- Dellor, E., Price-Wolf, J., Lovato-Hermann, K., Freisthler, B., & Curry, S.R. (2015). Introducing technology in child welfare referrals: A case study. *Journal of Technology in Human Services*, *33*(4), 330-344. doi: 10.1080/15228835.2015.1107520
- **Curry, S.R.**, & Abrams, L.S. (2015). "They lay down the foundation and then they leave room for us to build the house": A visual qualitative exploration of young adults' experiences of transitional housing. *Journal of the Society for Social Work and Research*, 6(1), 145-172. doi: 10.1086/680188
- Freisthler, B., Thomas, C.A., **Curry, S.R.,** Price Wolf, J. (2015). An alternative to residential neighborhoods: An exploratory study of how activity spaces and perception of neighborhood social processes relate to maladaptive parenting. Available online July 2015, *Child and Youth Care Forum*. doi: 10.1007/s10566-015-9329-7
- Curry, S.R., & Abrams, L.S. (2015). Housing and social support for youth aging out of foster care: State of the research literature and directions for future inquiry. *Child & Adolescent Social Work*, 32(2), 143-153. doi: 10.1007/s10560-014-0346-4

AWARDS AND FELLOWSHIPS

2016	Franklin D. Gilliam, Jr. Social Justice Award
2014, 2013	Meyer & Renee Luskin Fellowship
2014, 2012	Graduate Summer Research Mentorship Fellowship
2013	David and Marianna Fisher Fellowship
2013, 2011	Bette and Hans Lorenz Endowed Fellowship
2013	UCLA Luskin Social Justice Initiative Grant
2010	David Bohnett Fellowship
2007	William M. Fuson Award in Sociology & Anthropology
2007	Phi Beta Kappa, Earlham College
2007	College and Departmental Honors
2004	Plowshares Peace Studies Grant
2003-2007	Presidential Honors Scholarship, Earlham College

RESEARCH EXPERIENCE

2015-present **Graduate Student Researcher**

"A Pilot Intervention to Reduce Disparities through Formalizing Informal

Support: Developing a Web-Based Needs Portal"

Funded by California Social Work Education Center (CalSWEC)

Practice/University Partnership and the Ralph M. Parsons Foundation

PI: Dr. Bridget Freisthler, University of California, Los Angeles

"Maladaptive Parenting, Activity Spaces, and the Substance Use Environment" *Funded by NIAAA P60-AA-006282*

PI: Dr. Bridget Freisthler, University of California, Los Angeles

2013-2015 Graduate Student Researcher

"Conrad N. Hilton Foundation Foster Youth Strategic Initiative Evaluation (2012-2015)"

PI: Dr. Laura Abrams, University of California, Los Angeles

2012-2013 Graduate Student Researcher

"Institutional Logics, Moral Frames, and Advocacy"

PI: Dr. Eve Garrow, School of Social Work, University of Michigan

2011-2013 Graduate Student Researcher

"Housing Stability Among Transition Age Youth in Los Angeles County" Pls: Dr. Laura Abrams and Dr. Bridget Freisthler, UCLA

CLINICAL AND POLICY PRACTICE EXPERIENCE

2013-2015 Part-time Residence Manager, Case Management Intern

Downtown Women's Center (Permanent Supportive Housing), Los Angeles, CA

2010-2011 Policy Analyst/David Bohnett Fellow

Office of Mayor Antonio Villaraigosa, Los Angeles, CA

2009-2010 **MSW Intern**

Children Uniting Nations, Los Angeles, CA

2007-2009 Senior Program Associate

Sacramento Steps Forward (formerly the Sacramento City/County Ending Chronic Homelessness Initiative)

SERVICE TO THE UNIVERSITY

2015	Student Representative, UCLA Social Welfare Faculty Search Committee
2014-2015	Student Representative, UCLA Social Welfare Doctoral Committee
2011-2012	Co-organizer, Doctoral Student Working Papers Series

CHAPTER ONE: INTRODUCTION

Definition and Prevalence of Homelessness

While homelessness is very difficult to measure, national Point-in-Time counts based on the current federal definition estimate that about 578,424 people experienced homelessness on any given night in 2014 (National Alliance to End Homelessness [NAEH], 2015). Throughout 2013, 1.42 million people used a homeless shelter at some point during the year (HUD, 2013). The majority of those experiencing homelessness were single individuals (63%) and the remaining people were in families (37%) (NAEH, 2015). Despite household composition, people who are homeless are disproportionately low-income, urban, and from racial/ethnic minority groups (U.S. Department of Housing and Urban Development [HUD], 2013). These statistics are likely to be undercounts as definitions of what is to be considered "homeless" differs in both research and policy. However, many choose to use a recently expanded federal definition which considers homelessness under four primary categories: 1) literally homeless (defined as living in a homeless shelter or on the street or another place not meant for human habitation; NAEH; 2015); 2) at imminent risk of losing housing in 14 days; 3) homeless under other federal laws; or 4) fleeing/attempting to flee a domestic violence situation (HUD, 2015).

Definition and Prevalence of Housing Stability

Those who are "literally homeless" (Toro, 1998), in other words those who are living on the streets or in shelters, abandoned buildings, or other places not meant for human habitation, have been studied in depth due to the higher visibility of the problem and the high costs to the individual and community associated with literal homelessness (Culhane & Metraux, 2008). More recently, however, we have acknowledged precursors to homelessness such as unstable housing and extreme poverty (Lee et al., 2010). There is a fine line between what is considered

"literal" homelessness and the much larger population of people who are precariously housed; "doubled up" or "couch surfing" with friends or family (Entner et al., 1998); and/or constantly at risk of becoming homeless and often living paycheck to paycheck (Lee. Tyler & Wright, 2010; Haber & Toro, 2004). In fact, a recent national report to Congress noted that 75% of those who were housed immediately before coming to a homeless shelter were previously living doubled up in another person's home (HUD, 2013).

Homelessness should therefore not be dichotomized as "homeless" or "non-homeless," and rather appears to fall along a continuum from living in unstable housing (such as frequent moves, temporary living situations, or evictions/inability to pay rent) to living on the street (Lee et al., 2010; Frederick, Chwalek, Hughes, Karabanow, & Kidd, 2014). Homelessness is the most extreme end on a continuum of resource stability, in which unstable housing serves as the "tipping point" toward homelessness (Haber & Toro, 2004). This expands the argument such that if homelessness is considered a point on a continuum of poverty, then the focus of research should be on the factors that precipitate homelessness (Prante, 2013).

In 2013, approximately 7.72 million households in the United States experienced severe problems accessing secure housing (HUD, 2015). These individuals are defined by the HUD as those with "worst case housing needs," meaning that they 1) have incomes at or below 50 percent of Area Median Income and pay more than 50 percent of their income on rent or 2) have inadequate housing conditions or 3) both (HUD, 2015, p. 1). Burdens of high rent-to-income ratios drive most of these worst case housing needs; 97% of people with these high housing needs pay more than half of their income on rent (HUD, 2015). When individuals pay a high percentage of their income on rent, any crisis such as a medical emergency or loss of a job could lead them to homelessness (Culhane et al., 2007). While there have been increases in the

availability of housing in recent years, rental units that are affordable at the lowest income levels are still scarce: for every 100 very low-income renters there were only 65 affordable units and for every 100 very extremely low-income renters there were only 39 affordable units available (HUD, 2015). This unavailability of affordable housing for low-income individuals means that many are not able to afford housing in the first place, or are at risk of eviction when they do attain housing. When at risk of losing housing, some individuals or households will be able to access assistance from the government or non-profit sector, others may stay with friends or family ("doubled up"), and ultimately those without access to those supports will end up homeless (HUD, 2015). Since 2007, the number of individuals living doubled up increased by 67% and the number of individuals with severe housing cost burden increased by 25% (NAEH, 2015).

Housing and Homelessness Among Emerging and Young Adults

Homeless young adults (approximately ages 18-24) are different in many ways from homeless adults or homeless children in families (Toro, 2007). In a report based on 2013 homeless Point-in-Time estimates, HUD reported that on a single night in January 2013, approximately 39,500 unaccompanied (not accompanied by a child) youth ages 18 - 24 were homeless and just over half of these youth were unsheltered (HUD, 2014). An additional 19,670 young adults ages 18 – 24 were homeless with at least one child in their care (HUD, 2014). According to 2014 estimates, about 10% of unaccompanied homeless individuals are ages 18 – 24 (HUD, 2014). While these estimates and definitions of homeless youth versus homeless adults may seem clearly categorized in recent HUD reports, the age categories are often inconsistent across policies and research studies. For example, the term "homeless youth" or "homeless adolescents" is often used to refer to those anywhere between the ages 12 - 24 (Haber

& Toro, 2004). While studies on "homeless youth" often include youth both over and under age 18, the policy and service context is very different for those who are minors versus those who are legally adult (Toro, 2007), and research should reflect these distinctions. The present study will focus on young people ages 18-32 and will refer to them as young adults or emerging adults.

Home-Leaving Norms Among Emerging Adults

An understanding of housing stability and homelessness among young adults is not complete without an understanding of changing norms in home-leaving and support in the United States. In the past few decades, the concept of "adulthood" has changed dramatically, possibly in response to a range of cultural and demographic changes (Goldfarb, 2013). In the mid-1900s, early financial independence, early marriage and ability to earn a living wage without a college degree were common, but the transition to adulthood has changed dramatically in recent decades (Furstenberg, 2005; Goldfarb, 2013). Conceptualizations of "adulthood" have changed, with less people considering traditional milestones such as finishing school, finding employment, marriage, and parenthood prerequisites for adulthood (Arnett, 2004). These cultural changes may be due to such factors as greater need for additional education which delays entry into the workforce (Furstenberg, 2005), increased cost of post-secondary education and student debt, and housing costs that are prohibitive for individuals with low-wage jobs (Newman, 2012).

With the economic recession of 2008 came additional stressors on young renters; according to the Joint Center for Housing Studies at Harvard University (2015), over the past ten years there has been an increase in the percentage of renters ages 25-34 that spend more than 30% of their income on rent, the common benchmark for housing cost burden. Thus, it is not surprising that more young adults of Generation Y, born between 1980 and 1995 who entered adulthood between 1998 and 2013, are more likely to live with their parents well into adulthood.

This generation is also known as the Millennial Generation ("Millennials") and the "Boomerang Generation" due to the common practice of returning home after some time away (Goldfarb, 2013). Young adults are most likely to live with a biological parent when they are in their early twenties. Using the National Longitudinal Study of Adolescent to Adult Health (Add Health) researchers at University of Chicago noted that at age 21, 41% of a representative sample of sampled Millennials were living with a biological parent, 47% were living on their own, and 0.4% were living with a spouse or partner (Courtney et al., 2007). By age 23 – 24, 30% were living with a biological parent, 63% were living on their own, and 0.7% were living with a spouse or partner (Courtney, Lee & Rapp, 2010). At age 26, 17% were living with biological parents, 50% were living on their own, and 26% were living with a spouse or partner (Courtney, Dworsky, Brown, Cary, Love & Vorhies, 2011).

However, within the trend of later home-leaving among Millennials, there is not much known about the housing situations and stability of young adults based on family backgrounds. Young adults with wealthier parents have access to much more support than those without affluent parents, which perpetuates class differences (Goldfarb, 2013). Those who are not economically self-sufficient and do not have financial support from parents or other sources experience significant housing challenges that often persist through the second and third decade of life (Courtney et al., 2007). While patterns in living situations change through emerging and young adulthood, the prevalence of housing-related economic hardships remains relatively consistent. Many of these young adults face significant housing instability as they move through their twenties; 8% of 21-year-old youth had difficulty paying rent within the past year, 11% were unable to pay a utility bill, and 6% had their gas or electricity shut off (Courtney et al. 2007). At

ages 23 -24 and 26, the prevalence of economic hardships related to housing remained consistent (Courtney, Lee & Rapp, 2010; Courtney et al., 2011).

Consequences of Poor Housing Outcomes Among Emerging and Young Adults

We still know little about what factors influence living situations and housing-related hardships among young people or whether these influences differ at different points in emerging and early adulthood. However, we do know that these hardships in general can impact other youth outcomes. When one is living in temporary housing or is literally homeless, it may be very difficult to hold down a job or attend regular college courses (Center for Public Policy Priorities, 2001), and some claim that housing stability is the most important variable in job attainment because of the need for an address on applications (Geller & Curtis, 2011). Those with unstable housing may also experience worsened mental health conditions, particularly among those who emancipated from foster care (Fowler, Toro, & Miles, 2009). Further, when one is literally on the street or living in temporary housing, they may be at risk of physical and/or sexual victimization (Kidd & Scrimente, 2004; Tompsett & Toro, 2010). Overall, it is very difficult to pinpoint the specific contribution that various risk factors such as unemployment or health problems have on homelessness because it is likely a two-way relationship (Bakos, 2007; Broadbent, 2008; Ferguson, Bender, Thompson, Maccio & Pollio, 2012).

Precipitating Factors for Poor Housing Outcomes

Homelessness and poor housing outcomes at the population level are generally associated with housing affordability (Benjaminsen & Andrade, 2015). However, individuals also vary in their risk for poor housing stability due to individual characteristics and experiences (Shinn, 1992). One popular analogy described by researchers such as McChesney (1990) equates homelessness to the game of musical chairs, in which individuals or households are players in

competition for the limited number of "chairs," which in this case would be housing. Those with individual vulnerabilities such as having less stability due to foster care history may be more vulnerable to becoming homeless due to the inability to access one of the chairs (affordable housing) when the music stops (Shinn, 1992). The often distinct bodies of literature regarding risk factors for housing instability or homelessness at times overlap, however there is much more understanding of individual characteristics related to literal homelessness than there is for housing instability. Individual precipitating factors for unstable housing include loss of housing subsidy (Kreindler & Coodin, 2010; Nemiroff, Aubry, & Klodawsky, 2010; Dickson-Gomez et al., 2008), drug abuse (Berzin et al., 2011; Bolton, 2005), and lack of informal supports (e.g., family and friends) (Dickson-Gomez et al., 2008; Slesnick, Prestopnik, Meyers, & Glassman, 2007). Lack of access to stable employment with a living wage also impacts housing stability, as a reliable income is necessary for paying rent or a mortgage. Low educational attainment is also a risk factor for homelessness (Caton et al., 2000), possibly due to associated lower wages. We also know that childhood experiences such as foster care placements are related to poor adult outcomes such as homelessness. There is a higher prevalence of childhood out-of-home foster placement among homeless adults than in the general population (Herman, Susser, Struening, & Link, 1997; van den Bree, 2009). According to Berzin and colleagues (2011) a background in foster care often places young people in a vulnerable position due to lower educational attainment and skill sets, resources, and social capital needed to make a successful transition to adulthood. While outcomes vary, as a whole former foster youth have lower income than their peers (Macomber et al., 2008). While many peers of the same age might be able to get around difficulties of low income and lack of rental history by co-signing a lease with parents or staying with their parents for longer periods of time, former foster youth may not have this level of

support from biological family members (Berzin et al., 2011). In fact, former foster youth are less likely to live with biological family members after aging out of care than their peers of the same age (Iglehart, 1995). These additional risks may be contributing to a homelessness rate two times higher among young adults with any former foster care involvement, compared to matched control groups, and higher frequency of moves (Berzin et al., 2011).

The Importance of Social Relationships

According to stress theories such as the stress process model (Pearlin, 1991), stressors such as childhood instability can negatively influence well-being across the life course. However, stress theory also suggests that positive social resources can "buffer" the impact of these stressors and lead to improved outcomes in a range of domains (e.g. Kaniasty & Norris, 1997; Heller & Rook, 1997). As young people transition to adulthood, they may not be prepared to live independently and many still remain financially and emotionally dependent on their parents or other family members (Fingerman, Cheng, Wesselmann, Zarit & Briditt, 2012; Aquilino, 2006; Shoeni & Ross, 2005). There is also growing support for the notion that parental economic support during young adulthood is related to the young person's decisions regarding partnering and educational opportunities (Avery, Golscheider, & Speare, 1992; Goldscheider & Goldscheider, 1993). Those who must enter full-time work during the transition to adulthood because they lack financial support from family may not pursue further education and may suffer economically in the long run (Aquilino, 1999). Thus, social support in the transition to adulthood is increasingly important and may protect young people from poor outcomes such as housing instability.

In addition, young adults who remain disconnected from their family of origin in young adulthood due to foster care involvement or other family dysfunction will not have family

resources available. While approximately 70% of young adults who leave home eventually return to live with biological family in early adulthood, this is much less common among former foster youth (Berzin et al., 2011). Susser, Moore and Link (1993) suggest that these young adults may be at higher risk of homelessness, as kin support is very important when one is at risk of becoming homeless (Burt & Cohen, 1989; Herman et al., 1997). Having support from a caregiver or parent may allow these youth to engage in the gradual transition to adulthood as experienced by their peers without systems involvement (Arnett, 2000; Berzin et al., 2011). However, this support is not always positive; when individuals rely on tangible support such as temporary housing from network members, they may end up "wearing out their welcome," thus precipitating literal homelessness (Shinn et al., 1991, p. 1181).

Study Overview and Purpose

The purpose of this study is to further our understanding of childhood instability, social resources in the transition to adulthood, and housing stability in adulthood. In particular, this study aims to understand whether there is 1) a relationship between childhood instability and housing instability in adulthood, 2) a relationship between social support in the transition to adulthood and housing outcomes in adulthood, and 3) a moderating role of social support on the relationship between childhood instability and adult housing outcomes. These analyses are conducted using Waves I (1994-1995), III (2001-2002) and IV (2007-2008) of the National Longitudinal Study of Adolescent to Adult Health (Add Health).

By utilizing a longitudinal design, the study captures the often changing and dynamic housing situations of young people and capture precursors to these housing outcomes. I highlight whether these influences on housing stability operate differently among young people with a history of childhood adversity. Additionally, I provide a nuanced understanding of the

relationship between childhood experiences and housing outcomes beyond literal homelessness. While we have an understanding of the high prevalence of childhood adversity among homeless adults, we do not understand how different types of childhood adversity affect housing insecurity. This study builds on prior research on the stress process and stress buffering role of social support, adding a much-needed understanding of how stressors and different types of resources may lead to housing outcomes in particular. Prior to this study, the stress process model had not been used to understand the link between childhood adversity, social support, and adult housing outcomes. Findings from this study provide a greater understanding of the relevance of different childhood experiences for adult housing stability and living arrangements. While there is a growing understanding of various adverse childhood experiences their physical and psychological health consequences in adulthood, we still know little about their relationship to adult housing stability and economic well-being. Findings regarding these relationships, and potential buffering effects of social supports, can inform practice and policy in both the child welfare and housing sectors.

Organization of the Current Study

Chapter one has provided an overview of the definitions and scope of homelessness and housing instability generally and among young adults, as well as the current study purpose.

Chapter two provides a review of the literature on the relationship between childhood experiences and homelessness and the role of social support on this relationship. Chapter three introduces stress theories such as the stress process model, the concept of stress proliferation, and Conservation of Resources theory, which inform the current study. Chapter four presents the research design and analysis. Chapter five presents the results from the three research questions.

Finally, Chapter six discusses the findings and implications for practice, policy, and future research.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this chapter is to introduce the literature on factors contributing to homelessness or housing instability. In particular, the section will review the literature on (a) measuring homelessness and housing instability, (b) the relationship between childhood experiences and housing outcomes in adulthood, (c) the relationship between social support and housing outcomes, (d) the relationship between childhood experiences and adult social support, and (e) defining young adulthood in studies of homelessness and housing instability.

Measuring Homelessness and Housing Stability

While the dominant line of research on precursors for homelessness measures homelessness based on those who enter shelters or those who are living on the street (e.g. Roos et al., 2013; Fothergill et al., 2012), we know that there are other housing situations among lowincome individuals that are more common and that often precede literal homelessness (Coulton, Theodos, & Turner, 2009). According to the U.S. Department of Housing and Urban Development (HUD), about one-third of individuals who entered a homeless shelter were staying temporarily with friends or family or a hotel/motel the night before immediately prior to entering the shelter (HUD, 2010). While housing stability has been measured according to whether or not one has housing (with absence of housing or homelessness meaning unstable housing and presence of housing meaning stable housing (e.g., North, Eyrich-Garg, Pollio & Thirthalli, 2010)), the concept of housing stability is multi-dimensional. In their review of measures of housing stability, Frederick and colleagues (2014) note that the construct of housing stability remains poorly defined, and there is a lack of any standardized method of measuring the construct. The most common variables used to measure housing stability are residential status and residential stability including number of times moved, reasons for moves, and frequency of

moves due to make rent (Tsemberis, McHugo, Williams, Hanrahan, & Stefancic, 2007; Pavao, Alvarez, Baumino, Induni, & Kimberling, 2007; Bebout, Drake, Xie, McHugo, & Harris, 1997; Drake, Wallach, & Hoffman, 1989). Frederick et al. (2014) argue that single measures fail to capture the multidimensional concept of housing stability. Some have used multiple measures of housing stability, including one study of young adults formerly in foster care, which included a range of factors such as whether one was living with their family, number of moves since age 18, and housing type (Berzin, Rhodes, & Curtis, 2011). Another defined housing stability according to permanent housing (own apartment, living with caregivers), precarious housing (living with family or friends due to inability to pay rent/ "doubling up"), "inadequate or restrictive housing" (such as literal homelessness or stay in a correctional or psychiatric facility) (Fowler, Toro, & Miles, 2011, p. 339). However, most of the literature on the relationship between childhood experiences and housing stability focuses on literal homelessness, with some exceptions (Berzin et al., 2011; Courtney et al., 2011). Thus, we have little knowledge of a range of housing outcomes based on childhood experiences.

Relationship between Childhood Experiences and Housing Outcomes in Adulthood

A history of negative childhood experiences is common among those who experience homelessness in adulthood (Herman, Susser, Struening, & Link, 1997; van den Bree, 2009). In particular, experiences such as out-of-home care (Park et al., 2005; Berzin, Rhodes, & Curtis, 2011) and childhood maltreatment (Sundin & Baguley, 2014; Fowler, Toro, & Miles, 2009; Tyler, Hoyt, & Whitbeck, 2000; Unger, Kipke, Simon, Montgomery & Johnson, 1997; Shelton et al., 2009) are more commonly reported in surveys of homeless adults. For example, among individuals living in homeless shelters, 37% report childhood physical abuse compared to 4 – 6% in the general population (Sundin & Baugley, 2014). Further, prospective longitudinal research is

beginning to document that these family-related experiences are significant risk factors for homelessness (van den Bree et al., 2009), though there are limitations to these findings.

While there has been growing interest in the association between aging out of or emancipating from foster care and risk of homelessness (e.g., Berzin, Rhodes, & Curtis, 2011; Curry & Abrams, 2014; Dworsky, Napoliano, & Courtney, 2013), both retrospective and prospective studies indicate a link between any foster care involvement in childhood and homelessness and housing instability in adulthood (Berzin, Rhodes, & Curtis, 2011; Park, Metraux, & Culhane, 2004; Shelton et al., 2009). In adult samples, those with childhood foster care experience are also more likely to experience homelessness, with estimates ranging from 9% to 39% (Park et al., 2004; Bassuk et al., 1997; Koegel, Melamid & Burnam, 1995; Zlotnick, Robertson & Wright, 1999). Using administrative data from both the child welfare and homeless services systems in New York City, Park and colleagues (2005) found that those with foster care history were two times more likely to enter a shelter in young adulthood than those who received in-home preventative services. Similar rates have been seen in nationally representative surveys. In a study comparing youth with any foster care involvement against a matched comparison group (based on demographics), Berzin and colleagues (2011) also found that those with foster care history were two times more likely to experience homelessness and housing instability in young adulthood than those without foster care history. Of those with foster care history, 15% experienced homelessness in young adulthood, compared with 8.7% in the matched and 6.5% in the unmatched samples respectively. Former foster youth also reported a higher average number of moves after age 18 and a lower likelihood of returning home after leaving than matched youth (Berzin et al., 2011). The authors concluded that foster care history contributes to housing outcomes even when controlling for other risk factors. While most studies on housing outcomes

former foster youth focus primarily on incidence of homelessness, findings from the Midwest Evaluation of the Adult Functioning of Former Foster Youth ("Midwest Study") document housing instability among emancipated foster youth who had been in foster care at age 17. At age 23-24, most were living in their "own place" and were less likely than a representative sample of their peers without a history of foster care to be living with biological parents (Courtney, Dworsky, Lee, & Rapp, 2010). While few reported current homelessness, 24% had been homeless, 28% had couch-surfed since emancipation and 37% had been homeless or couch-surfed since emancipating from care. In addition, many faced challenges maintaining safe and stable housing; compared to a representative sample of peers who did not have a foster care history, these emancipated foster youth were more likely to report being evicted in the past 12 months and/or difficulty paying rent or utilities (Courtney et al., 2010).

Experiences other than foster care involvement are also linked to risk of poor housing outcomes. Adverse childhood experiences (ACEs), including childhood maltreatment (abuse and neglect), domestic violence or discord in the child's home, and parental psychopathology including incarceration, hospitalization for mental illness, attempt/committing suicide, or substance abuse, are related to poorer well-being in adulthood, including a higher risk for homelessness (Dube, Felitti, Dong, Chapman, Giles & Anda, 2003). In a study using data from a nationwide random-digit-dial telephone survey of households in the U.S. in the 1990s, adults with a history of any adverse childhood experiences were eight times more likely to report adult homelessness (Herman et al., 1997). Among those who had experienced physical and/or sexual abuse and feeling that they were not cared for ("lack of care") were 26 times more likely to experience homelessness in adulthood. A study using the National Epidemiologic Survey of

Alcohol and Related Conditions (NESARC) found that those with any type of ACE were significantly more likely to report ever being homeless (Roos et al., 2013).

The association between maltreatment history and adult homelessness has been primarily based on retrospective surveys of people in homeless shelters. As noted above, average prevalence rates for childhood physical abuse in homeless samples is 37%, compared to 4 - 6% in the general population (Sundin & Baugley, 2014). Average prevalence rates for childhood sexual abuse are 32% for women and 10% for men, compared with 10% and 5% for women and men in the general population, respectively (Sundin & Baugley, 2014). While one study found non-significant relationships in regards to sexual abuse and homelessness (Herman et al., 1997), overall the evidence for this positive relationship is strong (Fowler, Toro, & Miles, 2011; Tyler, Hoyt, & Whitbeck, 2000; Unger, Kipke, Simon, Montgomery, & Johnson, 1997), particularly for women (Koegel et al., 1995; Sundin & Baguley, 2014). In a meta-analysis of studies analyzing prevalence of past abuse among homeless adults, those with lower average age had a higher prevalence of childhood physical abuse, though specific ages were not specified (Sundin & Baugley, 2014). Though less evidence is available regarding the relationship between childhood neglect and adult homelessness, Shelton and colleagues (2009) found that those who reported neglect from childhood were almost 1.5 times more likely to report ever experiencing homelessness. However, in Shelton et al.'s (2009) study, because we don't know the timing of neglect or homelessness, we do not know whether reported neglect occurred before, after or during spells of homelessness.

In a prospective study of childhood precursors to homelessness in a community population of African Americans in a neighborhood in Chicago, Fothergill and colleagues (2012) reported that running away from home prior to age 15 was a strong predictor for any

homelessness between the ages of 15 and 42. However, the authors note that further research is needed to determine whether running away during adolescence puts one at risk for later homelessness beyond merely serving as a proxy for homelessness. We also do not know whether running away in adolescence is related to other poor housing outcomes in adulthood, such as doubling up or difficulties paying rent. Indicators of family stress such as having a parent with work limitations due to health problems, has also been found to predict risk of homelessness in the transition to adulthood (Brakenhoff, Jang, Slesnick, & Snyder, 2015).

Despite growing interest in longitudinal studies of precursors to homelessness, major methodological problems in this line of research exist. Many of these methodological problems are not limited to the exploration of childhood experiences and housing outcomes, but are rather problems that exist throughout the literature on precursors to homelessness. First, most research in this area relies on homeless individuals' retrospective reports of their childhoods, which may introduce recall bias (Shinn, 1992). Second, many studies are based on samples from homeless shelters and these individuals may be different from other homeless individuals in important ways, including the possibility that they are more chronically homeless than other homeless individuals (Roos et al., 2013). Third, another concern remains regarding the common practice of exploring childhood risks for homelessness using self-reports of lifetime homelessness (van den Bree et al., 2009; Shelton et al., 2009; Roos et al., 2013), rather than homelessness in adulthood. This concern in particular necessitates further research using longitudinal surveys that include measures of housing outcomes other than lifetime homelessness. The few studies that have explored housing outcomes and childhood experiences using nationally representative and longitudinal surveys, such as the National Study of Adolescent to Adult Health (Add Health) or the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC), have used a

measure of lifetime homelessness, which includes homelessness in childhood and/or in adulthood. By operationalizing homelessness as "ever homeless," we fail to consider the possibility that the homelessness occurred prior to or at the same time as any other factor under exploration, such as childhood experiences. For example, one may be placed in foster care in part because his or her family has been homeless, and many families experience significant distress and breakdown while homeless. Fourth, many studies use stricter criteria for homelessness than does recent policy; many studies ask if one is currently or has ever lived in a shelter, on the street, in a car, or another place not meant for human habitation (Berzin et al., 2011; Shelton et al., 2009; Dworksy & Courtney, 2009), whereas recent policy change in 2012 allows individuals and families to be considered homeless if they are at imminent risk of homelessness, including staying with relatives or friends temporarily ("couch-surfing" or "sofa-surfing") (U.S. Department of Housing and Urban Development, 2013). Lastly, few studies disaggregate homelessness experiences by age to allow for analysis of effects of different childhood experiences on homelessness in young adulthood or later in life.

Influence of Social Support on Housing Outcomes

In the classic articles by Cassel (1974) and Cobb (1976), the term "social support" was introduced and has since become an important construct in social research. Social support refers to one's social integration and relationships within groups (Turner & Brown, 2010). The construct is multi-dimensional, including such constructs as of emotional support (i.e., empathy or love), and instrumental support (i.e. tangible resources)(Langford et al., 1997; House, 1981). While we do not know how support in the transition to adulthood influences housing outcomes in young adulthood, we do know that support from various sources during this period of life influences educational and economic outcomes (Goldscheider & Goldscheider, 1993),

which are themselves related to later housing stability (Caton et al., 2000). Young adults from families who are able to make long-term investments in their children, including during the transition to adulthood, may have better economic outcomes later on in life (Avery, Goldscheider, & Speare, 1992). As young people transition to adulthood, they may not be prepared to live independently and many still remain financially and emotionally dependent on their parents or other family members (Fingerman, Cheng, Wesselmann, Zarit & Briditt, 2012; Aquilino, 2006; Shoeni & Ross, 2005). In fact, parents provide an average of \$2,200 per year to adult children ages 18-34 (Schoeni & Ross, 2005). Level of economic support from parents in the transition to adulthood in particular may inform a young person's choices regarding further education, which could later impact their economic outcomes (Avery, Goldscheider, & Speare, 1992; Goldscheider & Goldscheider, 1993) and housing stability in later years. For example, those who lack financial support from family may opt to enter full-time work rather than pursue post-secondary education (Aquilino, 1999), and this could affect socioeconomic status (Caton et al., 2000) and/or risk of poor housing outcomes in the long run. There are many reasons why parents may not support a young adult child economically, including beliefs about selfsufficiency, insufficient resources of their own, or poor relationship quality. Young adults who do not have an emotional connection with their biological parents due to family dysfunction or foster care involvement in childhood will also likely not receive other kinds of support from their biological parents. While some young people may have a relationship with biological parents after leaving foster care (Shin & Poertner, 2002 in Gomez, 2012), we do not know how many live with or receive assistance from their biological parents in young adulthood. This is important to know because there is limited evidence that financial support or emotional closeness to family member in the transition to adulthood may influence housing outcomes. In the Midwest Study, the odds of experiencing homelessness in the transition to adulthood (age 19) were lower among those who reported feeling close to at least one family member at a prior survey at age 17 or 18 (Dworsky & Courtney, 2009). A follow up survey yielded insignificant results for risk of homelessness by age 26 based on social support or closeness to a family member at age 17 or 18 (Dworsky, Napolitano, & Courtney, 2013).

While we do not know whether social support in the transition to adulthood is related to later housing outcomes, we do know that there is a relationship between social support and family homelessness. Homeless mothers often have smaller networks of support than housed mothers (Meadows-Oliver, 2005; Letiecq, Anderson, & Koblinsky, 1998; Bassuk et al., 1996), though there is some disagreement as to whether this is due to less social ties to begin with or the fact that they "wore out their welcome" with others as they relied on these relationships for support before entering a shelter (Goodman, 1991; Shinn, Knickman, & Weitzman, 1991). Instrumental support from family in particular may be related to risk of homelessness; Letiecq, Anderson & Koblinsky (1998) found that homeless mothers had significantly less family support in the prior six months compared to housed mothers, though there was no difference between the two groups in terms of support from friends or professional service providers.

In Fertig & Reingold's (2008) study they found that if structural factors are held constant, the probability of a family experiencing homelessness is related to factors such as housing subsidy receipt, living in public housing, or having relatives who can provide instrumental support such as temporary housing or lending money. Other have also found that among 900 homeless single adults, those who were homeless for a longer period of time have a smaller number of family members they can rely on for support (Eyrich, Pollio & North, 2003).

Similarly, Bassuk & Rosenberg (1988) found that 25% of homeless individuals reported no

friends that could provide support to them. Among homeless individuals with serious mental illness, individuals with history of childhood abuse were among those with the least amount of social support (Lam & Rosenheck, 1999).

It is possible that there is a relationship between support from a mentor and housing outcomes. While we do not know how presence of a supportive mentor in the transition to adulthood influences housing outcomes in particular for those from unstable childhood backgrounds, there is some evidence that when former foster youth have a mentor in the transition to adulthood, they have better outcomes across a range of domains (Ahrens et al., 2008; Salazar et al., 2011; Collins, Paris & Ward, 2010), and many of these outcomes such as mental health and educational attainment are related to housing outcomes and homelessness (Caton et al., 2000; Dworsky, Napolitano, & Courtney, 2013). In a study using the National Longitudinal Study of Adolescent Health (Add Health), young adults with prior foster care experience who indicated developing a relationship in adolescence with a non-parental adult mentor that lasted at least 2 years had better outcomes in higher education (borderline significance) (Ahrens et al., 2008). In a 2011 study using the cohort of Midwest Study former foster youth, Salazar et al. found that social support had direct effects on depression, and moderating and partial mediation effects on the relationship between childhood maltreatment and depression as the youth were aging out of the foster care system. In bivariate analyses, Collins, Paris & Ward (2010) found that former foster youth who reported having a mentor had significantly higher rates of high school or GED completion and lower reports of experiencing an episode of homelessness since age 18. To date, we do not know how the presence of or level of closeness to a mentor might buffer young people with a history of childhood instability (e.g. foster care) from poor housing outcomes.

Childhood Experiences and Adult Social Support

Few studies have explored whether those who were maltreated in childhood have less social support in adulthood. There is some evidence of lower social support among adults maltreated as children (McLewin & Muller, 2006; Runtz & Shallow, 1997; Schumm, Briggs-Phillips, & Hobfoll, 2006; Sperry & Widom, 2013; Vranceanu, Hobfoll, & Johnson, 2007) than those not maltreated as children, though one study found no differences between the two groups (Bradley, Schwartz, & Kaslow, 2005). One retrospective study of women who were maltreated as children showed that multi-type maltreatment in childhood was directly predictive of lower levels of social support in adulthood, which the authors hypothesized could be partially due to less support by family members who could have been the perpetrators (parents) or fellow survivors (siblings) of child maltreatment (Vranceanu, Hobfoll, & Johnson, 2007). Others have found that those who were maltreated in childhood have smaller networks of supportive individuals (Gibson & Hartshorne, 1996; Harmer, Sanderson & Mertin, 1999 in Vranceneau, 2007). We are beginning to understand what less social support means for those with a history of maltreatment; social support has been explored as a mediator and a moderator of the relationship between child maltreatment and mental health in particular. Cross-sectional studies indicate that social support mediates the relationship between child maltreatment and adult outcomes including psychological adjustment and self-esteem (Runtz & Shallow, 1997), posttraumatic stress disorder (Vranceanu et al., 2007), intimacy and trust (Pepin & Banyard, 2006). One of the few studies using longitudinal data has suggested that social support, measured by a scale that included perceived availability of others for emotional support, advice, or tangible support, mediates the relationship between childhood maltreatment and anxiety and depression in

adulthood after adjustment for sex, age, race and prior psychiatric diagnosis (Sperry & Widom, 2013). In addition, the "buffering hypothesis" (Cohen & Hoberman, 1983, p.99) suggests that social support moderates the relationship between stress or trauma and later pathology, in part by providing tangible or emotional resources to help deal with the stressful circumstances. To date, research on social support among adults maltreated as children has used composite scores of emotional and tangible supports (Salazar et al., 2011; Sperry & Widom, 2013) and none have separately examined whether financial or tangible supports might buffer individuals from poor adult outcomes such as housing instability.

Children and youth in foster care often have challenges developing supportive connections due to high instability, placement in nonfamily settings such as group homes, frequent changes in schools and placements, and removal from biological family (James, Landsverk & Slymen, 2004). Qualitative studies have pointed to intense pressure for these youth to be self-reliant, which can at times keep them from developing or maintaining supportive connections (Propp et al., 2003; Samuels & Pryce, 2008). This may be a particularly strong message for those who are aging out of foster care (Cunningham & Diversi, 2012). Sources of support may differ among former foster youth in comparison to their peers; one study found that while 69% of former foster youth indicated at least one supportive adult in their life, most indicated that this individual was a staff member from the child welfare system (Collins, Paris, & Ward, 2010). Many former foster youth maintain close relationships to biological family in the transition to adulthood, with approximately 17 - 54% of former foster youth returning to live with relatives after aging out of care (Collins, Paris, & Ward, 2008). However, these family connections don't always provide the support that youth need, and at times when youth rekindle these connections they get pulled back into dysfunctional family dynamics that can be harmful

(Samuels & Pryce, 2008). These situations will likely vary greatly from family to family. Some foster care alumni may opt to rely on peers rather than family when they face difficult circumstances, as illustrated by Perez and Toro's (2011) study of former foster youth. They found that former foster youth strongly relied on peers for social capital, and in particular utilized peer networks to find temporary places to stay if they were homeless. Others have also found that these youth often rely on their peers for instrumental and emotional support, though at times these peers are facing difficult socioeconomic circumstances themselves (Garret et al., 2008; Ammerman et al., 2004). In addition, natural mentoring relationships may be an important source of social support (Ahrens, DuBois, Richardson, Fan, & Lozano, 2008).

Defining Young Adulthood in Studies of Homelessness and Housing Instability

Homelessness appears to be a reflection of vulnerabilities and social environments at different periods in one's life (Haber & Toro, 2004). However, the literatures on specific "sub-populations" including homeless adolescents, families, and single adults have primarily evolved separately, largely ignoring the relationship between risk factors and different developmental periods (Haber & Toro, 2004). The ability to clearly understand influences across adolescence to adulthood has been complicated by fuzzy definitions of age ranges considered to be adolescence and adulthood. In research on homelessness, studies exploring "homeless adolescents" or "homeless youth" are inconsistent, sometimes referring to youth who are both under and over age 18 (e.g., Auerswald, Sugano, Ellen & Klausner, 2006) and sometimes including those up to age 25 or older (e.g., Kipke, Montgomery, & MacKenzie, 1993). Studies of homeless adults typically consider any single person 18 and over a single adult and rarely differentiate by age categories that are considered to be developmentally distinct across adulthood. For many youth entering adulthood, finding a place to live is of utmost importance (Perez & Romo, 2010), and

thus there is growing interest in the experience of emerging adults who face homelessness (Wenzel, Holloway, Golinelli, Ewing, Bowman, & Tucker, 2012). The role of social context and resources on housing outcomes during this time is of special interest in part due to growing understanding of the distinct developmental stage between 18-26 referred to as "emerging adulthood" (Arnett, 2001; Wenzel et al., 2012). This developmental period is characterized by instability and central tasks involve developing relationships with intimate partners, pursuing educational or employment goals, and taking greater responsibility for one's own needs (Arnett, 2011). Those without support may experience difficulty navigating the tasks associated with this developmental phase (Hagan & McCarthy, 2005) and this may impact later outcomes including risk of poor housing outcomes or homelessness. This may be particularly challenging for young adults of the Millennial generation who were born in 1980 and 1995 and who entered adulthood between 1998 and 2013. These young adults have come of age at a time when there is increased need to attain a post-secondary education (Furstenberg, 2005) and in which housing costs are often too high for individuals working in low-wage jobs (Newman, 2012).

Summary

For the past two decades there has been building evidence from homeless shelter samples that those who experience homelessness in adulthood report high rates of former foster care involvement (e.g. Park et al., 2005) and child maltreatment (e.g. Sundin & Baugley, 2014). However, conclusions in these retrospective studies are limited by potential recall bias (Shinn, 1992) and the possibility that those sampled in homeless shelters are different from those experiencing homelessness who do not enter shelters (Roos et al., 2013). Studies by van den Bree et al. (2009) and Shelton et al. (2009) used a population-based sample to assess childhood experiences and reports of homelessness among young adults, however because they measured

homelessness based on lifetime homeless rather than homelessness in adulthood, we are unable to conclude that the childhood experiences proceeded the homelessness. Thus, further research on the direct relationship between childhood experiences and experiences of housing instability or homelessness from a population-based sample is warranted.

The role of social support on homelessness is also unclear, particularly regarding whether level, type or source of social support moderates the relationship between childhood experiences and housing outcomes. There is evidence that type and source of social support may differ among adults with childhood instability such as maltreatment or foster care involvement. In particular, many former foster youth rely primarily on former social workers (Collins, Paris, & Ward, 2010) or peers (Perez & Toro, 2011), and while many reconnect or maintain relationships with biological family, they are less likely to live with biological family in young adulthood than their peers (Berzin et al., 2011). Given that adults with these childhood backgrounds may have differing levels or types of social relationships or support and are also more likely to report homelessness, it is important that we also understand whether social support might serve as a buffer against poor housing outcomes or homelessness. There is evidence that those who are facing homelessness have less social support (Meadows-Oliver, 2005; Letiecq, Anderson, & Koblinsky, 1998; Bassuk et al., 1996; Fertig & Reingold, 2008), though in many of these studies we do not know if lower social support contributed to poor housing outcomes or whether they had lower social support as a result of difficult housing circumstances.

The longitudinal design of this study allows for a better understanding of the relationship between childhood family background, social relationships in the transition to adulthood, and the housing stability of young people as they move through early adulthood. Most studies looking at housing stability and homelessness use cross-sectional data, which may fail to capture the

cyclical or temporary nature of housing situations in the often unstable transition to adulthood. In particular, there is very little known about influences on *young adults*, as most research on risks for housing stability or homelessness fails to consider these risks according to age. Most studies simply consider risks among "youth" (typically ranging from ages 13-24) or "adults" (typically ranging from ages 18-60), which fail to consider the range of developmental periods throughout adulthood. This study examines an array of indicators of housing instability, addressing the multi-dimensional nature of the construct. As noted above, the concept of housing stability remains poorly defined, and single-item measures of the construct may fail to account for the varying symptoms of housing instability and homelessness (Frederick et al., 2014).

CHAPTER 3: THEORETICAL FRAMEWORK & CONCEPTUAL MODEL

Stress theory informs the current study hypotheses about the relationship between childhood instability and housing outcomes in adulthood, including the influence of access to social resources on this relationship. The stress process model, which posits that stressors such as childhood instability can negatively influence well-being across the life course, suggests that these supports moderate the impact of these stressors. Others have tested the stress process model and the moderating role of social coping resources on stress and mental health and health (Kaniasty & Norris, 1997; Heller & Rook, 1997), however in the present study the model will be used to test the protective role of social support resources in the transition to adulthood on the relationship between childhood adversity and housing outcomes in adulthood. As described below, stress theories suggest that life stressors, such as childhood events, can lead to further loss or stress (Hobfoll, 1989; Pearlin, 1999). This study hypothesizes that supportive resources may change the likelihood that those living under stressful circumstances due to childhood experiences face poor housing stability in adulthood, in a sense disrupting the stress process that can lead to homelessness (Milburn & D'Ecole, 1991).

Stress Process Model, Stress Proliferation, and Conservation of Resources Theory

Stressful childhood experiences can serve as precursors to housing instability and homelessness, in part because these stressful experiences can weaken personal or social resources that may be needed to attain stable housing (Milburn & D'Ercole, 1991). Stress has been described as an event or series of events that exert internal demands, environmental demands (or both), which exceed the resources of an individual or system (Monat & Lazarus, 1991; Monat, Lazarus & Reevy, 2007). Generally, the term *stress* refers to a physiological alert in reaction to the presence of *stressors*, which are defined as external challenging influences on

an individual that impact functioning (Wheaton, Young, Montazar, & Stuart-Lahman, 2013). Stressors can be understood as demands, challenges, structural conditions, or threats that "by the very fact of their occurrence or existence, call into question the operating integrity of the organism" (Wheaton et al., 2013, p.300). Only those stressors that actually threaten or are perceived as threats to one's social locations, identity, role, or physical health can be stressful (Pearlin & Schooler, 1978). According to Pearlin & Schooler (1978), sources of stress can be a discrete event such as a divorce or accident, or may result from chronic stressors, such as longterm unemployment, that may be more subtle because they aren't always as acute as discrete life events. However, chronic stressors are more persistent. They may be associated with chronic deprivation (e.g. poverty) or may be associated with social roles such as caregiving for a terminally ill spouse (Pearlin & Schooler, 1978). In line with previous research, the present study conceptualizes childhood adversity such as child maltreatment as a significant life stressor (Evans & Hill, 2013; Hill et al., 2010) that leads to adverse outcomes, in this case poor housing outcomes. This conceptualization is in part informed by Milburn & D'Ercole's (1991) suggestion that acute and chronic events should be considered "stressors" that serve as precursors to homelessness or poor housing. Thus, the present study is informed by stress theories such as the stress process model (Pearlin et al., 1981), stress proliferation (Pearlin et al., 1990), and Conservation of Resources theory (Hobfoll, 1989). Overall, these theories inform study hypotheses that social support in the transition to adulthood will be compromised by childhood stressors, which in turn will create a stressful transition to adulthood in part due to little support, and in turn create further stressors in young adulthood including housing instability.

The stress process model was first published by Pearlin and colleagues (1981). The model provides a conceptual framework for understanding the effects of multiple and cumulative

sources of stress such as childhood adversity and low social support, which are often not independent of one another. They suggest that the effects of stressors on particular outcomes can be mediated or moderated by resources such as social support, self-concept, or coping resources. They explain that stressors may impact access to resources which can in turn have damaging consequences for well-being. These resources can also alter the effect of stressors such as financial strain on outcomes such as mental health. The mediating or moderating effects of resources may explain why some people, such as those without social support, are more negatively impacted by existing stressors than others (Aneshensel, 2015). This conceptual model of the "stress process" was derived from an examination of the influence of involuntary job loss on depression (Pearlin et al., 1981). Pearlin and colleagues (1981) found that the relationship between job loss and increased depression was largely mediated by financial and marital strain, which resulted from the job loss itself. However, the effects of these secondary stressors on depression were moderated by personal and social resources, and when the resources were reduced as a result of the stressors, depression would increase. They conclude that resources can both mediate and moderate the impact of job loss on depression. The three primary components of the stress process model include the stressors, the mediators and/or moderators of those stressors, and the consequences of those stressors (Pearlin, Lieberman, Menaghan, & Mullan, 1981).

Single or chronic stressors are not isolated but in fact may influence one another and accumulate. We know that there is a graded relationship of stressful childhood experiences to negative childhood and adult outcomes in a range of domains, such that the more adverse events a child experiences, the higher likelihood of poor outcomes (Anda et al., 2006). Further, having experienced multiple forms of child maltreatment is associated with lower social support and

lower social support influences the relationship between these childhood experiences and outcomes such as mental health (Vranceanu, Hobfoll, & Johnson, 2007). In the present study, single-episode or chronic childhood events may serve as a stressor that, without appropriate resources, may place one at further risk of poor housing outcomes. For example, a teenager may be sexually abused and run away from home due to the abuse. Each of these events compounds the original event of sexual abuse. Many youth run away from home due to abuse in their home of origin but may then experience negative events such as further victimization while away from home (Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001). Running away, if even for a short period of time, may remove one from original social networks and place one on a trajectory of negative experiences. Further, these significant forms of childhood adversity can "push" some children into early transitions into adulthood such as early entrance into the workforce and weaken the development of social resources that can promote successful transitions to adulthood (Luecken & Gress, 2010). In turn, youth are less prepared to face the often stressful transition to adult roles and responsibilities (Lueken & Lemery, 2004).

This process of accumulation of stressors is referred to as *stress proliferation* (Pearlin et al., 1990; Pearlin et al., 2007). The stress proliferation model was derived from investigations of the stress process (Pearlin et al., 1997) and describes how one stressor might create another source of stress which compounds the first stressor (Pearlin et al., 1997). As noted by Orleanna (2009), secondary stressors are not necessarily smaller in scale or effect, but are rather termed "secondary" because they were caused by an original stressor. Due to disrupted child-parent relationships in part caused by entry into foster care, for example, these relationships may be limited or nonexistent as the young person enters adulthood, which in itself can be a major stressor. According to life span attachment theory, the bond children create with their primary

caregivers and family members serve a basis for the child's relationship with family in adulthood, and stronger attachments in childhood (or less disruption in the relationship) may influence stronger social resources in early adulthood that can serve as a protection from other stressors (Afifi & Nussbaum, 2006). When families lack the normative prescription to help one another, those members who are facing stressors will have to cope alone (Afifi & Nussbaum, 2006). However, in the present study, those who are able to find resources elsewhere, such as through another non-parental adult or mentor, are hypothesized to have better outcomes due to the "buffering" effect of social resources.

Generally, the stress process model describes how different stressors in one's life might "spill over" into other domains of one's life to contribute to an accumulation of stressors in different domains. This "web of interconnections" between various factors in one's life operates such that an effect on one domain of one's life can create a chain of consequences (Pearlin, 1999). Inherent in this conceptual model is the notion that the stress process unfolds sequentially in time, instead of simultaneously. For example, those in disadvantaged social positions may be less likely to develop economic and social resources that they can use to cope with future stressors, which can in turn weaken future well-being (Lippert & Lee, 2015; Pearlin et al., 1981). This can inform an understanding of the impact of childhood stressors on adult housing instability and homelessness. Childhood stressors may weaken resources that they may need to successfully transition to adulthood, and this may set one on a challenging path. Without resources in the transition to adulthood, a young adult may struggle to make ends meet and lack direction (Avery & Freundlich, 2009). We would expect that this would lead to poor housing outcomes in particular because housing is so closely aligned with other outcomes such as socioeconomic status and emotional well-being, which are influenced by access to resources in

the transition to adulthood (Furstenberg, 2005). On the other hand, the presence of social resources in the transition to adulthood may weaken the likelihood that those under stress due to childhood instability face adverse housing outcomes.

Some have argued that the stress process model can help us understand how stressors can lead to risk of homelessness (Milburn & D'Ecole, 1991), though housing or homelessness research from the stress perspective is limited, and no date no studies have applied the stress process model to risk of poor housing outcomes. However, a number of studies conceptualize homelessness or poor housing as a result of stressors. While not directly informed by the stress process model, Shinn and colleagues (2007) conceptualize homelessness and housing outcomes as a result of stressful life events such as disruptive childhood experiences and difficult adult experiences such as unemployment. Lippert and Lee (2015) draw on stress process theory to explore the role of early life and current stressors on mental health disparities among people experiencing chronic versus temporary homelessness. They find that accumulation of stress from childhood and weakened resources contribute to higher likelihood of mental illness in chronically homeless adults, whereas those who are newly homeless have less mental health challenges. Wong & Pilavian (2001) also applied the stress process model to examine the relationship between life stressors such as childhood adverse events, social resources, and psychological distress in a sample of sheltered homeless individuals. They used structural equation modeling to test the mediating role of contact with relatives or friends and perceived availability of support on distress on various stressors and psychological distress. They found that perceived social support mediates the effect of adverse childhood experiences on psychological distress of sheltered homeless individuals, but did not find the same effect for actual contact with friends or relatives. They claim that this lack of effect of contacts may have

been due to lack of differentiation between positive and negative contacts with individuals in their network. However, the authors did find that those who had frequent contact with friends or family were also more likely to exit homelessness and obtain conventional housing.

As suggested above, the stress process model specifies the intervening role of social or psychological resources in the stress process. However, the stress process model also specifies that individuals can utilize social resources to moderate stressful circumstances or events. These coping resources can include individual resources (such as self-efficacy) or, in the case of the present study, social coping resources in the transition to adulthood, which can be weakened by previous experiences (Pearlin et al., 1981) such as childhood adversity. Social coping resources can partially protect those with difficult childhood experiences against poor outcomes (Afifi & Nussbaum, 2006). This protective effect is referred to as the "stress buffering hypothesis" of social support. The buffering role of social support has been demonstrated in the relationship between stress and mental and physical health (Kaniasty & Norris, 1997), and in work on the role of family in minimizing stressors associated with illness (Heller & Rook, 1997). In the present study, instrumental (e.g. tangible resources such as financial assistance) and emotional support in the transition to adulthood will be hypothesized to "buffer," or moderate, the risk of poor housing outcomes for those with and without a history of childhood instability.

The Conservation of Resources (COR) theory has built on stress theories to explain the impact of a threat of or actual loss of resources (Hobfoll, 1989). COR is an integrated model that encompasses multiple stress theories. According to COR, individuals seek to maintain resources such as energies (e.g. money), conditions (e.g. financial security), personal characteristics (e.g. self-esteem), and objects (e.g. housing) (Thompson, 2001). COR complements the stress process model by illustrating how a loss or lack of social resources can itself be stressful and lead to

future resource loss (Hill et al., 2010). Stevan Hobfoll, who originally conceptualized COR, and colleagues (2003) explain that when individuals are already experiencing poverty, further loss of resources can be particularly devastating because there are few other resources that can be drawn on to replace the loss. Unlike in the concept of stress proliferation, there is no distinction between the causes and consequences of resource loss. Resource loss is a sequential process in which a resource loss such as poverty is seen as precipitating further loss and accumulation of stressors (Haber & Toro, 2004). This conceptualization has been applied in understanding the impact of childhood sexual abuse on risk for HIV exposure such that resources to cope are reduced as a result of the original childhood abuse, which in turn creates further distress and risk behavior (Lamoureux, Palmieri, Jackson, & Hobfoll, 2012). As mentioned previously, when a child has an unhealthy attachment to caretakers he or she may have difficulty developing social support later on in life, and this can impact the ability to get through future stressful circumstances (Gringeri & Vogel-Ferguson, 2012; Hobfoll, 1989). This is particularly salient in adult survivors of childhood maltreatment; many survivors experience challenges in their social relationships in adulthood (Collins et al., 2010; Vranceauni et al., 2007). From a COR perspective, these early stressful experiences may lead to a loss of resources needed in the transition to adulthood, that, without intervention through new resources, could lead to future loss including unstable housing or homelessness. In contrast, those who have lost resources due to early stressful experiences but are able to acquire resources during the transition to adulthood may be able to reduce risks for poor outcomes such as housing instability. Thus, the causes and consequences of resource loss associated with COR theory will inform the moderating role of social support in the present study. Lack of access to social resources in the transition to adulthood will be hypothesized to lead to loss of stable housing resources. Diverging from COR,

however, the present study will hypothesize a sequential process across time, such that the relationship between a stressor due to childhood instability and adult housing outcomes can be vary by access to social support in the transition to adulthood.

Social support can be accessed through one's social network. The term refers to one's social integration, social bonds and relationships within groups (Turner & Brown, 2010). Social support is multi-dimensional, involving emotional support (i.e., empathy or love), informational support (i.e. advice), instrumental support (i.e. tangible resources), and appraisal support (feedback by one person that can be used as self-evaluation) (Langford et al., 1997). Social support has been explored among diverse populations including returning offenders (Martinez & Abrams, 2013); long-term welfare recipients (Sansone, 1998), and those with mental health or health challenges (Estroff & Zimmer, 1994). Support can be either formal or informal; informal support refers to the resources exchanged between family members, friends or neighbors without regulations (Martinez & Abrams, 2013), and formal support would be that received by institutions or organizations such as social service organizations, schools, or welfare offices.

There is some evidence that individuals facing homelessness may have less informal social support than those not experiencing homelessness (Meadows-Oliver, 2005; Letiecq, Anderson, & Koblinsky, 1998; Bassuk et al., 1996; Fertig & Reingold, 2008), though we don't know if social support contributed to homelessness or rather that they lost social connections or access to resources as a result of housing challenges. In a review of twelve studies on the social support of homeless versus housed mothers, Meadows-Oliver (2005) found that housed mothers are more likely to name their parents or other family as sources of support than homeless mothers, and this finding was consistent across studies that asked this question (Bassuk & Rosenberg, 1988; Letiecq et al., 1996; Wood et al., 1990). However, the frequency of contact

with these supports was inconsistent across studies. While some found that housed mothers had more frequent contacts than homeless mothers (Bassuk & Rosenberg, 1988; Letiecq et al., 1998), others found that homeless mothers had more contact with supports, particularly family members, than housed mothers (Shinn et al., 1991). Still others found no significant differences in the two groups (Goodman, 1991). Meadows-Oliver (2005) concludes that inconsistencies may be in part due to differential measurement of social support and definition of homelessness.

Conceptual Framework for the Current Study

The present study is informed by stress theory, including the stress process model, the concept of stress proliferation, and Conservation of Resources theory. The stress process model posits that the impact of life stressors can be moderated by coping resources such as social support. Others have tested the stress process model through an exploration of the moderating role of social coping resources on stress and mental and physical health (Kaniasty & Norris, 1997), and in work on the role of family in minimizing stressors associated with illness (Heller & Rook, 1997). To date, however, we know little about the protective role of social support resources in the transition to adulthood on the relationship between childhood instability and housing outcomes in adulthood.

The concept of stress proliferation (Pearlin, 1999) and the Conservation of Resources (COR) theory (Hobfoll, 1989) are related in that they both describe paths in which one loss or stressor leads to further loss or stress. Thus, stressful childhood experiences such as entry into foster care may, in line with COR theory, facilitate loss of social resources that may be needed in the transition to adulthood. Prior work among former foster youth suggests that these young adults generally have less social support (Singer, Berzin, & Hokanson, 2011), but it is still unclear whether access to social support may change the relationship between childhood

instability and poor housing outcomes (Berzin, Rhodes, & Curtis, 2011; Dworsky, Napoliano, & Courtney, 2013).

The present study's conceptual framework, displayed in Figure 1 below, illustrates that the hypothesized primary stressor for poor housing outcomes in adulthood originates from childhood family instability, including experiences of childhood maltreatment, foster care involvement, running away from home, and being kicked out of home.

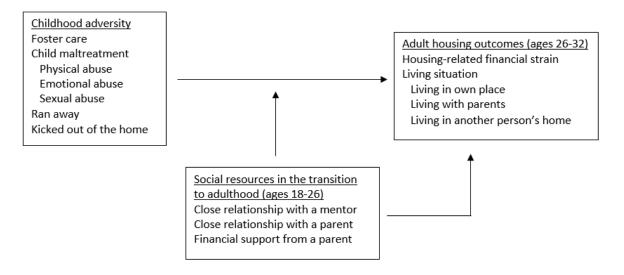


Figure 1. Conceptual Model

The relationship between childhood family instability and poor housing outcomes was hypothesized to be moderated by the quality (e.g. level of closeness to a mentor) and type (instrumental or emotional) social support, in the transition to adulthood. In line with the stress process model, stress proliferation, and COR, stressors and loss of resources are modeled over time. This allows a better understanding of how each stressor builds on the prior stressor to lead to the outcome of poor housing stability. The lack of social support in the transition to adulthood is conceptualized as a stressor in itself and a loss of resources in part due to indicators of an

unstable childhood. These measures of social support have the potential to moderate the relationship between unstable childhood and poor housing outcomes in adulthood.

Research Questions and Hypotheses

 Does history of foster care involvement, running away in adolescence, being kicked out of home, or frequency of incidents of child maltreatment (physical, emotional, or sexual abuse) directly relate to housing stress and independent living in adulthood (ages 26-32)

H1a: Those who indicate any foster care experience in childhood will have a greater likelihood of housing stress in Wave 4.

H1b: Those who indicate having running away from home in adolescence will have a greater likelihood a greater likelihood of housing stress in Wave 4.

H1c: Those who indicate having been kicked out of home will have a greater likelihood a greater likelihood of housing stress in Wave 4.

H1d: Those who indicate higher frequency of physical abuse in childhood will have a greater likelihood of housing stress in Wave 4.

H1e: Those who indicate higher frequency of emotional abuse in childhood will have a greater likelihood a greater likelihood of housing stress in Wave 4.

H1f: Those who indicate higher frequency of sexual abuse in childhood will have a a greater likelihood of housing stress in Wave 4.

2. Is social support (measured by closeness to a parent or mentor and financial support from a parent) in the transition to adulthood related to housing stress and living situation in adulthood?

H2a: Those who receive more financial support from a parent in the past 12 months in the transition to adulthood will be less likely to report housing stress and more likely to attain independent housing in adulthood.

H2b: Those who indicate being closer with at least one parent in the transition to adulthood will be less likely to report housing stress in adulthood and more likely to attain independent housing in adulthood.

H2c: Those who indicate being closer with a mentor in the transition to adulthood will be less likely to report housing stress in adulthood and more likely to attain independent housing in adulthood.

3. Does social support in the transition to adulthood moderate the relationship between childhood adversity and housing stress and living situation in adulthood?

H3a: The differences in housing stress in adulthood between those with and without childhood adversity will be less with the presence of any type or source of social support in the transition to adulthood than the differences observed without the presence of social support.

H3b: The differences in living situation in adulthood between those with and without a history of childhood adversity will be less with the presence of any type or source of social support in the transition to adulthood than the differences observed without the presence of social support.

CHAPTER 4: METHODOLOGY

Add Health Study Design

This study uses the National Longitudinal Survey of Adolescent to Adult Health (Add Health), housed at the University of North Carolina, Chapel Hill. Add Health was developed due to a mandate by the U.S. Congress to fund a study of adolescent health and health behavior under multiple contexts (Harris, 2013). The longitudinal survey has been primarily funded by the National Institute of Child Health and Development. To date, four waves of data include longitudinal data on the health, social, economic and psychological status of adolescents as they move through the life course. Geographic data, such as information about respondents' neighborhoods from sources such as the U.S. Census, were also merged with survey data to allow for a greater understanding of the effects of context on individuals as they age.

The primary sampling frame for Add Health was derived from the Quality Education Database, regarded as the most comprehensive list of high schools in the United States (Tourangeau & Shin, 1999), from which a stratified sample of 80 high schools were selected with unequal probability selection so as to ensure representation according to school type (public, private, parochial), school size, grade span, curriculum (e.g. general, special education, alternative, vocational), urbanization, Census region, Census division, percent white and percent black (Harris, Halpern, Whitsel, Hussey, Entzel, & Udry, 2009; Tourangeau & Shin, 1999). Fifty-two feeder schools (such as middle schools or junior highs) for each high school were also identified according to student contribution to the high school so that the ultimate school sample included one pair of schools for each of the 80 communities (Harris, 2013).

From September 1994 until April 1995, Add Health collected Wave I data from approximately 90,000 adolescents in 7th through 12th grade (ages 11-21). From these 90,000

students, 20,745 were selected through stratified sampling by gender and grade to participate in an in-home survey, which lasted approximately two hours. This in-home sample included 1) a core sample 12,105 individuals selected by stratifying students in each participating school by sex and grade level and randomly selecting 17 from each stratum, and 2) selected oversamples from special populations including black adolescents with a parent with a college degree; disabled adolescents; adolescents living together in the same home; Cuban, Puerto Rican, and Chinese adolescents; and those from 16 schools from which all students were included in the in-home sample (Chen & Chantala, 2014). Wave II of data collection occurred from April through August 1996 with 14,738 of the same adolescents who had participated in the in-school survey in Wave I (88.6% response rate), excluding teens in 12th grade at Wave I and not part of the genetic sample. Wave II also collected data from a small number who did not take part in Wave I.

Between August 2001 and April 2002, Wave III included follow-up in-home interviews with 15,170 Wave I respondents (76% response rate), who were ages 18-26 (Chantala, Kalsbeek, & Adraca, 2005). Questions in Wave III were broadened to capture experiences in the transition to adulthood, including relationships, post-secondary education, labor market experiences, and community involvement (Harris, 2013). The in-home interviews in Wave III took an average of 134 minutes to complete (Harris, 2013). In 2008, Wave IV of the study followed up with 15,701 of the original Wave I respondents, representing a response rate of 80.2%. Whites and females were more likely to respond in Wave IV than males and other racial/ethnic groups (Brownstein, Kalsbeek, Tabor, Entzel, Daza & Harris, 2010). Most interviews in Wave IV were conducted in respondents' homes and included a 90-minute questionnaire with more sensitive questions administered through computer assisted self-interview (CASI). Following the interview at Wave

IV, interviewers took an additional 30 minutes to collect biological specimens, a medication log, and physical measurements (Harris, 2013).

Sample

The sample for this study includes individuals who participated in Add Health Waves I, III, and IV in-home surveys and excludes those who were did not participate in all three waves. Wave 2 was excluded because many Wave 2 participants were, by design not included in subsequent waves. Of the total 20,745 participants included in the in-home sample at Wave I, 5,578 were not included in Wave III of data collection. Another 2,135 who participated in both Waves I and III did not participate in Wave IV. In addition, 571 did not have sample weights for Wave IV and will be excluded. An additional 1,043 were missing responses to key study variables and were thus excluded from the analytic sample. The total sample for this study was 10,034. A schematic of the sample selection can be seen in Figure 2, below. Sample demographics can be found in Table 1.

Figure 2: Study sample

Wave 1 N = 20,745	Total in-home sample in Wave I		
Wave III N = 15,167	• 5,578 respondents lost to follow up at Wave III		
Wave IV N = 13,032	• 2,135 respondents lost to follow up at Wave IV		
N = 10,607	• 1,043 missing on one or more study variables		
N = 10,605	• 2 dropped because of no race identifier		
N= 10,034	• 571 missing valid weights at Wave IV		
N = 10,034	Analytic sample		

Wave 4 Sample Demographics (Weighted n = 10,034)				
	Unweighted		Weighted	
Variables	Mean(SD)/%	n	Mean (LSE)/%	
Age	28.48(1.78)	11,241	28.24(0.12)	
Race				
White, Non-Hispanic	56.51	6,352	70.39	
Black, Non-Hispanic	20.16	2,266	13.87	
Asian, Non-Hispanic	6.46	726	3.30	
Other, Non-Hispanic	1.65	185	1.45	
Hispanic, All Races	15.23	1,712	10.98	
Sex				
Male	45.13	5,073	48.42	
Female	54.87	6,168	51.58	

Measures

Dependent Variables

Housing stress

Housing stress in young adulthood (ages 26 - 32) was measured in Wave IV.

Respondents were asked a series of questions about whether in the past 12 months there was a

time when they (or their household): (1) "didn't pay the full amount of the rent or mortgage because you didn't have enough money?", (2) "were evicted from your house or apartment for not paying the rent or mortgage?", (3) "didn't pay the full amount of a gas, electricity, or oil bill because you didn't have enough money?" or (4) "had the service turned off by the gas or electric company, or the oil company wouldn't deliver, because payments were not made?" In this study, a dichotomous variable will represent housing stress. Those who indicated "yes" on any of these questions were coded "1" on this variable and those who answered "no" on all of these questions were coded "0." Eviction was combined with other housing strain because of the small number of individuals in the analytic sample who experienced eviction (n = 169).

Living Situation

Respondents were also asked "Where do you live now? That is, where do you stay most often?" Options included your (1) parent's home; (2) another person's home; (3) your own place (apartment, house, trailer, etc.); (4) group quarters (dormitory, barracks, group home, hospital, communal home, prison or penitentiary, etc.); (5) homeless - that is, you have no regular place to stay; or (6) other. This variable was recoded to measure living in parents' home, in another person's home, or own place. Other living situations were not included due to the small number of individuals in this category (n = 211).

Independent Variables

Informal social support

Three variables reflecting 1) parental financial support, 2) closeness to a parent, and 3) closeness to a mentor in the transition to adulthood was created using responses from Wave III.

Social support from Wave III was used to measure the effect of social support in the transition to

adulthood, as this is a time when many young adults need continued support to prosper (Furstenberg, Rumbaut, & Settersten, 2005).

Parental financial support in the transition to adulthood was measured by a series of questions in Wave III about financial assistance from one's residential or non-residential father and mother. Respondents were asked the following regarding up to six parental figures: current residential mother, current residential father, previous residential mother, previous residential father, nonresidential biological mother, and/or nonresidential biological father: "Has this person given you any money or paid for anything significant for you during the past 12 months? Don't include regular birthday or holiday gifts." Next, respondents who answered this question with "yes" were asked "Has {HE/SHE} given you any money or paid for anything significant for you during the past 12 months? Don't include regular birthday or holiday gifts?" Responses were categorical and included "less than \$200," "\$200 to \$499," "\$500 to \$999" and "\$1000 or more." It is not clear whether amounts from multiple sources can be combined because it is not clear that, for example, one's biological mother is not also his or her current residential mother (Johnson, 2013). Therefore, in line with previous research using these measures (Johnson, 2013), the highest amount received from any parental figure was used. Those who indicated "no" to the first question about receiving any financial support from all parents (residential or nonresidential) will be coded "0" in the new variable.

Closeness to a parent in the transition to adulthood was measured in Wave III and captured relationships with eight parental figures (current residential mother, current residential father, previous residential mother, previous residential father, biological mother, biological father, previously unreported stepmother, and previously unreported stepfather). Respondents were asked the following about both their current or previous mother and father, as applicable:

""How close do you feel to {HIM/HER} these days?"," with scales ranging from "not close at all," "only a little close," "somewhat close," "quite close," and "very close." A new variable was created to reflect the highest score from any parent. For example, if a respondent strongly agrees that she is very close to her mother but neither agrees nor disagrees that she is close to her father, she will be scored as "strongly agree." This variable was recoded so that responses "not close at all" or "only a little close" were combined.

Closeness to a mentor was measured with the question "Other than your parents or stepparents, has an adult made an important positive difference in your life at any time since you
were 14 years old?" Respondents who answered "yes" were also asked "Is {HE/ SHE/ THIS
PERSON} still living?" and "How close do you feel to {HIM/HER} these days?" Responses
ranged from "not close at all," "only a little close," "somewhat close," "quite close," and "very
close." The variable was recoded and those who indicate that they have no mentor, that their
mentor is no longer living, or that they are "not at all close" with their mentor will be coded 0.
The variable indicating closeness to a mentor was recoded so that "not close at all" or "only a
little close" were combined.

Childhood Adversity

Child maltreatment was measured retrospectively in Wave IV. Respondents were asked a series of questions about mistreatment by adults prior to their 18th birthday. To measure physical abuse, they were asked "How often did a parent or adult caregiver hit you with a fist, kick you, or throw you down on the floor, into a wall, or down the stairs?" ?" For each of these questions, item response categories included: "one time," "two times," "three to five times," "six to ten times," "more than ten times," or "this never happened." To measure emotional abuse, respondents were also asked, "How often did a parent or other adult caregiver say things that

really hurt your feelings or made you feel like you were not wanted or loved?" Item response categories were the same as those for physical abuse. Lastly, to measure sexual abuse respondents were asked "How often did a parent or adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations." Item responses were the same as those for physical and emotional abuse, however the responses for "one time" and "two times" were combined, as were "three to five times," "six to ten times" and "more than ten times" were combined because of low numbers of responses in many of the categories.

Foster care placement was measured retrospectively in Wave III. Respondents were asked "Did you ever live in a foster home." Responses were simply "yes" or "no."

Ran away was measured retrospectively in Wave III. Respondents were asked "Have you [did you] ever run away from home?" and "Have your [did your] parents ever ordered you to move out of their house?" Those who answered "yes" to this variable were coded 1 and those who answered "no" were coded 0.

Kicked out of home was also measured retrospectively in Wave III. Respondents were asked "Have your [did your] parents ever ordered you to move out of their house?" Those who answered "yes" to this variable were coded 1 and those who answered "no" were coded 0.

Control Variables

Covariates included gender; race/ethnicity; age; parental educational attainment in Wave 1; substance abuse; depression; socioeconomic status in Wave III; relationship status; receipt of housing assistance, welfare benefits, or food stamps as an adult; and respondent's number of children.

Race/ethnicity was constructed from responses in Wave I to the questions: "Are you of Hispanic or Latino origin" and "What is your race." The variable was re-coded as dummy variables for White, Black, Asian, and Other. Additionally, there was a dummy variable for Hispanic ethnicity. This allowed an individual who is both black and Hispanic, for example, to be coded as both.

Gender was reported in Wave 1. The variable was coded female = 1 and male = 0.

Age was measured in Wave IV. The variable was calculated by subtracting birth year and month from interview date.

Parental educational attainment was measured using respondent's responses to Wave 1 in-home surveys asking about the highest level of education they had completed. For each parent respondents were asked, "How far did in school did {this person} go?" For those living in homes headed by a single parent, the education level for that parent was used. For those in two-parent households, the highest education level from either parent was used.

Substance use in Wave IV was captured in binary questions inquiring how many times in the past 12 months they had used alcohol, marijuana, or another "favorite drug." Problematic substance use has been associated with housing instability among youth (Berzin et al., 2011).

Alcohol use was measured in terms of frequency and duration, as well as binge drinking behaviors. A measure capturing the estimated frequency and duration of alcohol consumed in the past 12 months was a product of these two questions. First, respondents were asked "During the past 12 months, on how many days did you drink alcohol?" Response categories included "none," "1 or 2 days in the past 12 months," "once a month or less (3 to 12 days in the past 12 months)" "2 or 3 days a month," "1 or 2 days a week," "3 to 5 days a week," or "every day or almost every day." These categories were recoded to an estimate of number of drinks in the past

12 months using the midpoint number of days. For those indicating drinking alcohol "1 or 2 days in the past 12 months," the response was recoded to the midpoint of 1 to 2 days, which was 1.5 days in the past 12 months. For those selecting the category "once a month or less (3 to 12 days in the past 12 months)," the response was recoded to the midpoint between 3 and 12 days, or 7.5. Those indicating "2 or 3 days a month," were recoded to the midpoint of 2.5 and this was multiplied by 12 months to equal 30. For those selecting "1 or 2 days a week," this was recoded to 1.5 days per week and multiplied by 52 weeks to equal 78. Those indicating "3 to 5 days" was recoded to 4 days and multiplied by 52 weeks to equal 208. Lastly, those who indicated "every day or almost every day" were recoded to 365.

Next, to measure quantity of alcohol drinking, respondents were asked on a continuous scale "Think of all of the times you have had a drink during the past 12 months. How many drinks did you usually have each time? A 'drink' is a glass of wine, a can or bottle of beer, a wine cooler, a shot glass of liquor, or a mixed drink." Reponses ranged from 1 drink to 18 drinks. This measure was truncated at 10 drinks per drinking session because of an overly skewed distribution.

A measure of the total estimated number of drinks in the past 12 months, the variable indicating number of days drinking and the variable measuring average number of drinks each time were multiplied together. The range of the product of the frequency measure and quantity of alcohol included a range from 0 to 3,650 estimated drinks in the past 12 months (weighted mean = 214.78, linearized standard error = 8.38). Given that the quantity measure was truncated at 10 drinks per drinking session, the quantity multiplied by the frequency measure was also truncated at 10 times 365 days per year, which equals a maximum value of 3,650 drinks per year.

To measure binge drinking, respondents were asked "During the past 12 months, on how many days did you drink [5 or more/4 or more] drinks in a row?" Male respondents were asked on how many days they had 5 or more drinks in a row and female respondents were asked on how many days they had 4 or more drinks in a row. Response categories included "none," "1 or 2 days in the past 12 months," "once a month or less (3 to 12 days in the past 12 months)" "2 or 3 days a month," "1 or 2 days a week," "3 to 5 days a week," or "every day or almost every day." The categories were re-coded to "none," "once a month or less ("1 or 2 days in past 12 months" or "once a month or less"), "2 – 3 days per month," "weekly" ("1 -2 days a week" or "3 – 5 days a week") or "every day or almost every day."

Marijuana use was measured in the question, "During the past 12 months, on how many days did you use marijuana?" Response categories included "none," "1 or 2 days in the past 12 months," "once a month or less," "2 or 3 days a month," "1 or 2 days a week," "3 to 5 days a week," or "every day or almost every day." The categories were re-coded to "none," "once a month or less ("1 or 2 days in past 12 months" or "once a month or less"), "2 – 3 days per month," "weekly" ("1 -2 days a week" or "3 – 5 days a week") or " every day or almost every day."

"Other" drug use. If respondents responded in the affirmative to the question "Have you ever used any of the following drugs: steroids; cocaine; crystal meth; other types of illegal drugs, such as LSD, PCP, ecstasy, heroin, mushrooms, or inhalants" they were subsequently asked, "Which one type have you used most frequently in your lifetime?" They were then asked "During the past 12 months, on how many days did you use {favorite drug}?" Response categories included "none," "1 or 2 days in the past 12 months," "once a month or less," "2 or 3 days a month," "1 or 2 days a week," "3 to 5 days a week," or "every day or almost every day."

The categories were re-coded to a binary variable indicating "none" or "at least one time in the past 12 months."

Depression

Depression is considered a risk factor for homelessness, and was thus included as a covariate in the present study. Respondents were asked five questions in Wave 4 from the original twenty questions in the Center for Epidemiologic Series Depression Scale (CES-D)(Goodman, 1999). Previous research has indicated that the 5-item CES-D is valid (Perreira, Deeb-Sossa, Harris, & Bollen, 2005). Respondents were asked how often in the past seven days they 1) were bothered by things that usually don't bother them, 2) could not shake off the blues, even with the help from your family or friends, 3) felt depressed, 4) had trouble keeping their mind on what they were doing and 5) felt sad. Item response options ranged from 1 - "never" to 4 - "very often." The scale thus ranged from 0 to 20 points.

Socioeconomic status

Household income in Wave 4 was measured in the question "Thinking about your income and the income of everyone who lives in your household and contributes to the household budget, what was the total household income before taxes and deductions in {2006/2007/2008}? Include all sources of income, including non-legal sources?" Respondents could choose from categories "less than \$5,000," "\$5,000 to \$9,999," "\$10,000 to \$14,999," "15,000 to \$19,999," "\$20,000 to \$24,999," "\$25,000 to \$29,999," "\$30,000 to \$39,999," "\$40,000 to \$49,999," "\$50,000 to \$74,999," "\$75,000 to \$9,999," "\$100,000 to 150,000," and "151,000 or more." These categories were collapsed into five categories, including "less than \$15,000," "\$15,001 to \$30,000," "\$30,000 to \$45,000," "\$45,000 to \$150,000," and \$150,000 or more."

Household debt was measured using the question, "Now, think about your debts besides any mortgage on your home. How much do you and others in your household still owe altogether? Include all debts, including all types of loans, credit card debt, medical or legal bills, etc." Categories included "Less than \$1,000," "\$1,000 to \$4,999," "\$5,000 to \$9,999," "\$10,000 to \$24,999," "\$25,000 to \$49,999," "\$50,000 to \$99,999," "\$100,000 to \$249,999," or \$250,000 or more." The categories for "\$100,000 to \$249,999" and "\$250,000 or more" were combined because of the small cell size for \$250,000 or more (1.8%).

Household assets were measured using the question, "What is the best estimate of the total value of your assets and the assets of everyone who lives in your household and contributes to the household budget? Include all assets, such as bank accounts, retirement plans and stocks. Do not include equity in your home." Response categories included "Less than \$5,000," "\$5,000 to \$9,999," "\$10,000 to \$24,999," "\$25,000 to 49,999," "\$50,000 to \$99,999," "\$100,000 to \$249,999," "\$250,000 to \$999,999," and "\$1,000,000 or more." The last two categories were combined into a category called "\$250,000 or more" because of small cell sizes.

Married and cohabitation status were measured in Wave IV. Those who answered the question "Do you live alone or with others" as "with others" were asked "What is their relationship to you." Those who answered "husband/wife" were coded "yes" for "married" and those who answered "yes" for "partner/boyfriend/girlfriend" were coded "yes" for "cohabitating."

Receipt of housing assistance, public assistance, and food stamps in adulthood was measured using a question asked in Wave 4. Respondents were asked "Between 2002 and

{2006/2007/2008}, did you or others in your household receive any public assistance, welfare payments, or food stamps?" Respondents answered "yes" or "no" to this question.

Number of children was measured using a final question asked about their own or a partner's pregnancies and live births. Respondents were asked "How many of these children are still living?" A new variable to measure number of living children was created and those who legitimately skipped the question regarding how many were still living were coded "0." Descriptive measures can be found in Table 2, below.

Table 2 Weighted Descriptive Statistics (n = 10,034)

	n	Mean (LSE)/%
Dependent Variables		
Living Situation		
Parent's home	1,353	12.51
Another person's home	491	4.61
Own place	8,190	82.89
Housing-related financial strain		
Yes	1,819	18.41
No	8,215	81.59
Childhood Adversity		
Foster care		
Yes	216	1.46
No	9,818	98.54
Physical abuse		
Never happened	8,240	82.81
1 time	507	4.80
2 times	325	3.18
3-5 times	323	3.19
6-10 times	171	1.51
> 10 times	468	4.52
Emotional abuse		
Never happened	5,298	52.61
1 time	1,030	10.19
2 times	1,002	9.46
3-5 times	1,056	11.11
6-10 times	470	4.79
> 10 times	1,178	11.85
Sexual abuse		
Never happened	9,563	95.35
1-2 times	229	2.38
3 or more times	242	2.27

Table 2Weighted Descriptive Statistics (n = 10.034)

	n	Mean (LSE)/%
Ran away		
Yes	770	7.36
No	9,264	92.64
Ordered out		
Yes	1,035	10.70
No	8,999	89.30
Social Support		
Financial support from parents		
Less than \$200	3,714	37.17
\$200 - \$499	1,703	16.97
\$500 - \$999	1,328	13.05
\$1,000 or more	3,289	31.86
Closeness to a parent	,	
Not close at all/Only a little	261	2.52
Somewhat close	711	6.94
Quite close	2,389	24.92
Very close	6,673	65.62
Closeness to a mentor	,	
Not close at all/Only a little	4,178	41.99
Somewhat close	1,590	16.02
Quite close	2,000	20.09
Very close	2,266	21.90
Control variables	·	
Age at Wave 4	10,034	28.22(0.12)
Race		
White, Non-Hispanic	5,745	70.39
Black, Non-Hispanic	1,981	13.87
Asian, Non-Hispanic	628	3.33
Other, Non-Hispanic	164	1.45
Hispanic, All Races	1,516	10.98
Gender	,	
Female	5,486	51.58
Male	4,548	48.42
Parental educational attainment	1,010	10.12
Less than high school	1,153	11.11
High school/GED	2,948	31.46
Vocational education or some college	2,141	21.69
Graduated college	2,415	23.53
More than college education	1,377	12.21
Income in Wave 4	1,077	12.21
\$0 - \$15,000	2,347	23.76
\$15,001 - \$30,000	2,514	25.95
\$30,001 - \$45,000	2,403	23.43
\$45,001 - \$150,000	24.45	23.73
\$150,001 or more	325	3.12
	323	5.12
Educational attainment by W4	0.050	00.54
High school grad or less	2,050	22.54
Some college/vocational education	4,398	42.84

Table 2 Weighted Descriptive Statistics (n = 10,034)

weighted Descriptive Statistics (n = 10,034)	n	Mean (LSE)/%
College graduate/some graduate school	2,589	25.65
Completed graduate school	997	8.97
Welfare, public assistance or food stamp receipt		
between W3 and W4		
Yes	2,058	21.54
No	79.76	78.47
Debt		
Less than \$1,000	1,150	12.56
\$1,000 to \$4,999	1,454	14.01
\$5,000 to \$9,999	14,64	14.86
\$10,000 to \$24,999	2,527	25.44
\$25,000 to \$49,999	1,818	18.46
\$50,000 to \$99,999	1,025	9.43
\$100,000 or more	596	5.24
Assets		
Less than \$5,000	1,668	16.93
\$5,000 to \$9,999	1,137	10.94
\$10,000 to \$24,999	1,814	18.61
\$25,000 to \$49,999	1,757	17.34
\$50,000 to \$99,999	1,655	16.80
\$100,000 to \$249,000	1,190	11.88
\$250,000 or more	813	7.51
Quantity of drinking * Frequency of drinking in past	10,034	214 70/0 20\
12 months	10,034	214.78(8.38)
Binge drinking past 12 months		
No binge drinking past 12 months	5,212	47.87
Once a month or less	2,885	30.27
2 or 3 days a month	865	9.77
Weekly	994	11.35
Every day	78	7.4
Marijuana use past 12 months		
No marijuana use past 12 months	7,811	76.17
Once a month or less	966	9.90
2 or 3 days a month	231	2.52
Weekly	517	5.65
Every day	509	5.76
Other drug use past 12 months		
Yes	952	10.78
No	9,082	89.22
Depression (CESD score)	10,034	2.50(0.04)
Cohabiting but not married		` ,
Yes	1,726	17.96
No	8,308	82.04
Married	179	1.85
Yes	4,320	43.39
No	5,714	56.61
Number of children	10,034	0.89(0.03)
Married	,	(7)
Yes	9,367	82.49
	,	

Table 2 Weighted Descriptive Statistics (n = 10,034)

	n	Mean (LSE)/%
No	1,878	17.51

Statistical Analysis

Analysis Weights

Due to the unequal selection probabilities for schools and students of the original schools in Wave I, sampling weights were developed to adjust for over-sampling of particular populations so that the data represent the entire population of youth in the U.S. For example, because black teens whose parents have a college education were over-sampled, family income for black respondents will be biased unless statistical methods adjust for this over-sampling (Chen & Chantala, 2014). Add Health includes cross-section weights for schools, weights for special sub-populations in Wave III, longitudinal weights, and multilevel weights. In addition, adjustments must be made for the stratification and clustered data collected from schools and students within schools because the observations are not independent and equally distributed, heightening the risk of Type I error (Chen & Chantala, 2014). Using sampling weights allows analysts to achieve unbiased estimates of standard errors and population parameters. As suggested by Add Health documentation, in longitudinal data analysis weights for the most recent wave of data should be used (Chen & Chantala, 2014). Weights are constructed from Wave I, so respondents must have valid weights at both the most recent wave and at Wave I. In the present study, weights for those included in all three waves were used.

Assessment of Attrition and Missing Data

Assessment of Attrition

Individual respondents with and without complete data were compared on independent and dependent variables. In particular, an attrition analysis was conducted to assess differences due to attrition. A new variable was created to capture those who were lost to attrition between Waves 3 and 4. Then, a logistic regression was conducted to assess differences in key predictor variables from Wave 1 that could be associated with attrition between waves. Table 3 shows that older respondents had slightly higher odds of dropping out between Waves 3 and 4 than younger respondents. In addition, compared to White Non-Hispanic respondents, those who identified as any other race or ethnicity had higher odds of leaving the study before Wave 4. Female respondents had a lower rate of attrition than males. Parental educational attainment, a proxy for parental socioeconomic status, was not significantly related to odds of leaving the study between Waves 3 and 4.

Table 3Logistic Regression Results for Exclusion from Analytic Sample due to Attrition at Wave 4 (N = 14,310)

<u>ade to /ttilition at Wave 4 (14 = 14, </u>	010)	
Wave 1 Demographic Variables	OR	95% CI
Age	1.04***	1.27, 1.68
Race ^a		
Black, Non-Hispanic	1.33***	1.17, 1.51
Asian, Non-Hispanic	2.12***	1.79, 2.51
Other, Non-Hispanic	1.77**	1.27, 2.46
Hispanic, All Races	1.47***	1.28, 1.68
Female	0.68***	0.58, 0.71
Parental education b		
High school diploma/GED	0.88	0.75, 1.04
Some college	0.86	0.73, 1.02
College graduate	0.89	0.75, 1.05
Graduate school	0.82	0.67, 1.00

^a Reference category: White Non-Hispanic

^b Reference category: Less than high school

^{*} p < .05; ** p < .01; *** p < .001

An additional analysis was conducted to assess differences based on being dropped from the analytic sample due to missing responses on one of the study variables. This analysis only included those who responded to Wayes 1, 3, and 4. The analysis tested the effect of being dropped from the analysis by demographic characteristics as well as focal study variables. As shown in Table 4, individuals who were female had higher odds of being dropped due to incomplete responses to key variables than males. Those who reported housing stress at Wave 4 had lower odds of being excluded from the study sample than those who did not experience housing stress. Those who were living in their own place at Wave 4 were less likely to be excluded due to incomplete responses than those who were living with parents. Those who had high levels of childhood physical abuse (more than 10 times), and those who experienced emotional abuse 1 time, 3-5 times, 6-10 times, or more than 10 times were also less likely to be excluded from the sample than those who experienced no childhood physical or no emotional abuse, respectively. Lastly, those who reported being somewhat close, quite close, or very close to a mentor in Wave 3 were less likely to be excluded due to nonresponse to key variables than those who reported not being close at all to a mentor.

Table 4Logistic Regression Results for Exclusion from Analytic Sample due to Missing Responses (N = 11,938)

	OR	95% CI
Age	0.98	0.95, 1.02
Race ^a		
Black, Non-Hispanic	1.04	0.89, 1.21
Asian, Non-Hispanic	1.07	0.84, 1.36
Other, Non-Hispanic	0.86	0.53, 1.39
Hispanic, All Races	0.92	0.76, 1.10
Female	1.25***	1.11, 1.42
Parental education ^b		
High school diploma/GED	1.01	0.83, 1.24
Some college	0.95	0.76, 1.18
College graduate	0.95	0.75, 1.16
Graduate school	0.83	0.64, 1.06

Table 4 Logistic Regression Results for Exclusion from Analytic Sample due to Missing Responses (N = 11,938)

due to Missing Responses (N = 11,	938) OR	95% CI
Housing stress at Wave 4	0.83*	0.70, 0.99
Living situation at Wave 4	0.03	0.70, 0.33
Living in someone else's home	0.89	0.73, 1.08
Living in own place	0.03	0.15, 0.21
Foster care	0.73	0.46, 1.23
Any physical abuse (ref = none)	0.73	0.40, 1.23
1 time	0.98	0.75, 1.29
2 times	0.84	0.57, 1.23
3-5 times	0.97	0.68, 1.39
6-10 times	0.86	0.52, 1.47
10 or more times	0.58**	0.39, 0.87
Emotional abuse (ref = none)		
Never happened	0.91	0.75, 1.11
1 time	0.56***	0.44, 0.71
2 times	0.89	0.73, 1.11
3-5 times	0.63**	0.45, 0.88
6-10 times	0.63**	0.45, 0.88
10 or more times	0.86*	0.67, 1.09
Sexual abuse		
1-2 times	1.25	0.86, 1.82
3 or more times	0.86	0.54, 1.38
Ran away	1.21	0.97, 1.52
Kicked out of home	1.15	0.94, 1.41
Financial support from parents		
\$200 - \$499	1.09	0.93, 1.31
\$500 - \$999	1.04	0.86, 1.26
\$1,000 or more	0.87	0.75, 1.02
Closeness to a parent		
Somewhat close	0.94	0.59, 1.49
Quite close	0.97	0.64, 1.47
Very close	1.03	0.68, 1.54
Closeness to a mentor		
Somewhat close	0.79*	0.65, 0.95
Quite close	0.81*	0.68, 0.96
Very close	0.97	0.83, 1.13

^a Reference category: White Non-Hispanic ^b Reference category: Less than high school * p < .05; ** p < .01; *** p < .001

Analyses to Test Hypotheses

The primary purpose of the current study was to test 1) the relationship between childhood adversity and housing stress in adulthood 2) the relationship between social support in the transition to adulthood and housing stress and independent living in adulthood, and 3) whether social support in the transition to adulthood moderates the relationship between childhood adversity and housing instability in adulthood. To test the main effects of childhood adversity on housing stability in adulthood and conditional effects of social support on this relationship, logistic regression was used. To account for the complex sample design, all analyses were conducted in Stata 14 using the survey procedures command (svy). Without these weights, parameter estimates may be biased and standard errors may be underestimated, leading to chance of Type I error (Aneshensel, 2013).

Models were tested using logistic regression. To test the relationship between childhood adversity and housing instability in adulthood, all key variables and covariates were regressed on the outcome variables for housing stress and living situation at Wave 4. To test the relationship between social support in the transition to adulthood (Wave 3) and housing instability in adulthood (Wave 4), all three measures of social support, along with covariates, were included in one model. Ultimately, the models involved testing the relationship between the dependent variables for "housing instability" as a linear function of a set of independent variables. The logit equation was be the following:

(EQ1)
$$\ln \hat{o}^{Y+} = a + b_1 X_1 + b_2 X_2 + b_3 X_3 \dots b_i X_i$$

Where $\ln \hat{o}^{Y+}$ is the natural log of the odds of housing instability (Aneshensel, 2013). The intercept a is the estimated value of the logit when all of the independent variables are equal to 0

(i.e. when the childhood instability is 0 and all control variables equal 0); b_I is the expected change in the log odds of being unstably housed in adulthood when foster care history is coded 1 for "yes", when all of the other independent variables are held constant. This logic continues, with b_2 indicating the expected change in the log odds of being unstably housed in adulthood when history of childhood neglect is coded 1 for "yes", when all of the other independent variables are held constant, and so on. We can then take the exponent of the logit equation, below, to determine the odds of housing instability (Y):

(EQ2)
$$\ln \hat{o}^{Y+} = e^{a+b_1 X_1 + b_2 X_2 + \dots b_i X_i}$$

According to Aneschensel (2013), here $\ln \hat{o}^{Y+}$ is the estimated odds of a positive dependent variable, e^a is the estimated odds of the intercept and $e^b{}_I{}^X{}_I$ is the estimated odds of being positive on Y when the other independent variables are controlled for. In the present study, when the coefficient for foster care (X_1) is exactly 1, this suggests that there is no relationship between the odds of housing instability in adulthood and history of foster care. A coefficient of more than 1 suggests a positive relationship such that that the odds of housing instability in adulthood increases with higher levels of childhood instability, controlling for covariates. A coefficient between 0 and 1 will suggest a negative relationship, such that the odds of housing instability in adulthood decreases with the presence of foster care history.

Due to the use of weights in this study, the method of estimation will change. In a weighted logistic regression, the contribution of each individual observation to the residual sum of squares is proportional to its population weight (Aneschensel, 2013), and we draw inferences about the probable true population from the standard errors from the following equation:

(EQ3)
$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 \dots \beta_j X_j + \varepsilon_j$$

In the above equation, the subscript j refers to the jth observation. The symbols α , β_1 and β_2 are population parameters and ε_j refers to other unobserved systematic effects on Y and measurement error.

To test moderating effects of social support in the transition to adulthood, groups of interaction variables were created: (1) measure of emotional abuse X level of parental financial support and (2) measure of emotional abuse X closeness to a mentor.

The Holm Bonferroni sequential approach were used to correct for multiple comparisons and risk of Type I error (Abdi, 2010). In Holm's version of the Bonferroni correction, hypotheses are rejected sequentially. The p-values for all comparisons are ordered from lowest to highest. Next, one starts at the top of the list using a corrected alpha, which is determined by dividing the original alpha of 0.05 by the number of comparisons in the column, n. If this first comparison is rejected, one moves to the next comparison and uses a correction of 0.05 divided by n - 1. This procedure is repeated for each comparison until no additional rejection can be done, at which point all remaining null hypotheses are accepted (Holm, 1979).

Research Question 1

The first research question asks "Do history of foster care involvement, running away in adolescence, being kicked out of home, or frequency of incidents of child maltreatment (physical, emotional, or sexual abuse) directly relate to housing outcomes in adulthood (ages 26-32)?" Logistic regressions were used to test the direct relationship between each indicator of childhood adversity (foster care, physical abuse, sexual abuse, emotional abuse, kicked out of home and/or running away) on two separate indicators of housing in adulthood: 1) housing-related financial strain and 2) living situation. To test Hypothesis 1, bivariate relationships

between each indicator of childhood adversity and 1) housing related-instability and 2) living situation and were tested first. Next, housing-related strain and living situation were regressed on all five measures of childhood adversity and control variables. Lastly, the Holm Bonferroni sequential approach was used to correct for multiple comparisons and risk of Type I error.

Research Question 2

Research Question 2 asks if social support (measured by closeness to a parent or mentor and financial support from a parent) in the transition to adulthood is related to housing stress in adulthood. Hypothesis 2a posits that those who receive more financial support from a parent in the past 12 months in the transition to adulthood will be less likely to report housing stress and more likely to attain independent housing in adulthood. Hypothesis 2b posits that those who indicate being closer with at least one parent in the transition to adulthood will be less likely to report housing stress in adulthood and more likely to attain independent housing in adulthood. Hypothesis 2c suggests that those who indicate being closer with a mentor in the transition to adulthood will be less likely to report housing stress in adulthood and more likely to attain independent housing in adulthood. To test these relationships, bivariate relationships were tested first. Housing stress and living situation were each regressed on all three social support variables and controls. The Holm Bonferroni sequential approach was used correct for multiple comparisons and risk of Type I error.

Research Question 3

Research Question 3 asks if social support in the transition to adulthood moderates the relationship between childhood instability and housing instability in adulthood. Hypothesis 3a posits that the differences in housing stress in adulthood between those with and without childhood adversity will be less with the presence of any type or source of social support in the

transition to adulthood than the differences observed without the presence of social support.

Hypothesis 3b posits that the differences in living situation in adulthood between those with and without a history of childhood adversity will be less with the presence of any type or source of social support in the transition to adulthood than the differences observed without the presence of social support.

Only those measures of childhood adversity and measures of social support that were significant in Research Questions 1 and 2 were included in the moderation analysis. These separate conditional models therefore tested the interaction effects of emotional abuse and parental financial support on adult housing stress first, followed by the interaction effects of emotional abuse and closeness to a mentor on adult housing stress next, then the interaction effects of emotional abuse and financial support on adult living situation, and finally the interaction effects of emotional abuse and closeness to a mentor on adult living situation.

Next, a Holm Bonferroni approach corrected for multiple comparisons. Lastly, predictive margins were calculated for the full models.

CHAPTER 5: RESULTS

Research Question 1: Childhood Adversity and Housing Outcomes

Bivariate Analyses

Table 5 shows the unadjusted binomial and multinomial logistic regressions for each independent variable representing childhood adversity regressed on the two dependent variables for housing-related stress and living situation in Wave 4 without control variables included. We see that all the measures of childhood adversity are significantly associated with housing-related stress in Wave 4. In addition, having experienced physical abuse 1 time or 10 or more times is significantly associated with odds of living with parents, having experienced emotional abuse 1 times, 3 -5 times, or 10 or more times is significantly associated with odds of living with parents, and running away from home and being kicked out of one's home is significantly associated with the odds of living in another person's home, compared to living in one's own place.

Table 5Weighted Unadjusted Logistic Regression Models for Main Childhood Adversity Independent Variables (n = 10,034)

	Housing-Related Stress		(Con	Living Situation (Compared to Living in One's Own Place)		
			Living \	Living With Parents		in Another (Non- al) Person's Home
	OR	95% CI	RRR	95% CI	RRR	95% Cl
Foster care	2.80***	1.90, 4.12	1.05	0.52, 2.14	1.89	0.99, 3.60
Physical abuse		,		,		,
(ref = none)						
`1 time	1.50**	1.17, 1.93	1.32*	1.02, 1.70	1.09	0.64, 1.86
2 times	1.95***	1.48, 2.54	0.69	0.45, 1.07	1.20	0.71, 2.02
3-5 times	1.99***	1.49, 2.64	0.86	0.57, 1.32	1.66	0.99, 2.76
6-10 times	1.78***	1.18, 2.67	0.54	0.27, 1.10	1.39	0.78, 2.48
10 or more times	2.41***	1.81, 3.22	0.62*	0.43, 0.89	0.86	0.51, 1.45
Sexual abuse						
(ref = none)						
1-2 times	1.94**	1.28, 2.97	0.92	0.57, 1.48	0.89	0.46, 1.75
3 or more times	2.65***	1.91, 3.69	0.52	0.37, 1.05	0.97	0.51, 1.87
Emotional abuse						
(ref = none)						
1 time	1.24*	1.00, 1.53	1.33**	1.07, 1.64	1.44	0.95, 2.17
2 times	1.81***	1.48, 3.31	1.00	0.81, 1.25	1.00	0.67, 1.49

Table 5Weighted Unadjusted Logistic Regression Models for Main Childhood Adversity Independent Variables (n = 10,034)

	Housing-Related Stress		(Com	Living Situation (Compared to Living in One's Own Plac		
			Living V	Living With Parents		in Another (Non- al) Person's Home
	OR	95% CI	RRR	95% CI	RRR	95% CI
3-5 times	1.72***	1.41, 2.11	0.65**	0.49, 0.85	0.96	0.64, 1.46
6-10 times	1.58**	1.20, 2.09	0.83	0.58, 1.19	0.88	0.57, 1.36
10 or more times	2.29***	1.89, 2.77	0.59***	0.46, 0.76	0.81	0.56, 1.15
Kicked out of home	2.07***	1.76, 2.43	0.91	0.72, 1.15	1.65**	1.21, 2.24
Ran away	2.30***	1.86, 2.85	1.01	0.75, 1.36	1.65**	1.19, 2.29

Childhood Adversity and Housing Stress in Wave 4

Table 6 displays the results for the logistic regression of housing-related financial strain in Wave 4 on childhood adversity. Unlike in Table 5, Table 6 includes control variables. Results indicate that when control variables are included, many fewer variables are significantly associated with housing stress. However, reporting childhood emotional abuse is associated with increased odds of housing-related financial strain in young adulthood. Compared with those who experienced no emotional abuse in childhood, those who reported that they experienced emotional abuse two times in their childhood had approximately 60% higher odds (OR = 1.60, p < .001) of experiencing housing-related financial strain. In addition, those who reported that they experienced emotional abuse 3 - 5 times in their childhood had almost 50% higher odds (OR = 1.44, p < .05) of housing strain compared to those who did not report emotional abuse. Further, those who reported that emotional abuse occurred more than ten times in childhood also experienced 42% higher odds (OR = 1.42, p < .05) of housing strain in young adulthood.

No other measures of childhood adversity were significantly associated with housingrelated financial strain in the full model. However, other covariates were significantly related to housing strain. In particular, measures of race, number of children, socioeconomic status, marijuana use and depression were related to odds of housing strain. Compared to White Non-Hispanic respondents, those who identified as Black Non-Hispanic had higher odds of experiencing housing-related financial strain in Wave 4. For each additional child one had in Wave 4, individuals experienced a higher odds of housing strain.

Measures of socioeconomic status were also related to odds of housing strain. Compared to those who had a household income of \$0 - \$15,000 in the past year, those who made \$45,001 - \$150,000 had lower odds of housing strain. Personal educational attainment was also related to housing strain. Compared to those who had a high school diploma or less, college graduates and those who completed graduate school had lower odds of housing strain. Higher debt was also associated with much higher odds of housing strain. Substance use was related to housing strain; those who used no marijuana in the past 12 months, those who used once a month or less, weekly, or every day had higher odds of housing strain. Lastly, for each additional higher point on the CESD measure of depression, individuals had higher odds of housing strain.

Table 6Weighted Logistic Regression for Housing-Related Stress at Wave 4 on Childhood Adversity (n = 10,034)

	OR	95% CI	Wald test statistic
Foster care	1.01	0.60, 1.69	0.97
Physical abuse (ref = none)			0.36
1 time	0.97	0.67, 1.40	
2 times	1.42	0.97, 2.06	
3-5 times	1.08	0.75, 1.56	
6-10 times	1.03	0.61, 1.74	
> 10 times	1.38	0.93, 2.05	
Sexual abuse (ref = none)			0.57
1-2 times	1.02	0.63, 1.67	
3 or more times	1.27	0.81, 1.99	
Emotional abuse (ref = none)			< 0.001
1 time	0.99	0.75, 1.31	
2 times	1.60***	1.26, 2.04	
3-5 times	1.44*	1.01, 2.06	
6-10 times	0.96	0.65, 1.40	
> 10 times	1.45*	1.07, 1.96	
Kicked out of home	1.05	0.86, 1.28	0.62
Ran away	1.21	0.89, 1.64	0.21

Table 6Weighted Logistic Regression for Housing-Related Stress at Wave 4 on Childhood Adversity (n = 10,034)

Cilianood Adversity (II = 10,034)	OR	95% CI	Wald test statistic
Control Variables			
Age W4	1.04	0.99, 1.09	
Race/ethnicity ^a			
Hispanic	0.95	0.71, 1.26	
Black NH	1.36**	1.12, 1.66	
Asian NH	0.56*	0.36, 0.87	
Other NH	1.28	0.78, 2.12	
Female ^b	1.08	0.87, 1.23	
Parental education ^c			
High school diploma/GED	1.04	0.83, 1.32	
Some college	0.99	0.77, 1.28	
College graduate	0.89	0.68, 1.18	
Some graduate school or	1.37	0.96, 1.96	
more			
Household income W4 d			
\$15,001 - \$30,000	1.09	0.88, 1.35	
\$30,001 - \$45,000	0.82	0.63, 1.06	
\$45,001 - \$150,000	0.37***	0.26, 0.51	
\$150,001 or more	1.39	0.88, 2.19	
Education W4 e		,	
Voc ed/ some college	1.00	0.83, 1.21	
College graduate	0.48***	0.36, 0.63	
Completed grad school	0.41***	0.26, 0.63	
Welfare, public assistance or	1.90****	1.56, 2.31	
food stamps in W3 or W4		•	
Household debt W4 f			
\$1,000 to \$4,999	1.82**	1.24, 2.69	
\$5,000 to \$9,999	2.04**	1.41, 2.95	
\$10,000 to \$24,999	2.25***	1.62, 3.15	
\$25,000 to \$49,999	2.25***	1.54, 3.28	
\$50,000 to \$99,999	2.74***	1.79, 4.18	
\$100,000 or more	3.02***	1.86, 4.91	
Household assets W4 ^g		,	
\$5,000 to \$9,999	0.55***	0.43, 0.73	
\$10,000 to \$24,999	0.54***	0.42, 0.69	
\$25,000 to \$49,999	0.39***	0.28, 0.55	
\$50,000 to \$99,999	0.29***	0.23, 0.37	
\$100,000 to \$249,000	0.31***	0.21, 0.44	
\$250,000 or more	0.09***	0.06, 0.15	
Quantity * frequency of drinking	1.00	0.99, 1.01	
in past 12 months		,	
Binge drinking past 12 months h			
Once a month or less	1.07	0.86, 1.34	
2 or 3 days a month	1.00	0.74, 1.35	
Weekly	1.15	0.80, 1.66	
Every day	0.65	0.21, 1.99	
Marijuana use past 12 months i	3.00	3.21, 1.00	
Once a month or less	1.45**	1.18, 2.51	
2 or 3 days a month	1.42	0.83, 2.44	
2 of o days a month		3.00, 2.44	

Table 6Weighted Logistic Regression for Housing-Related Stress at Wave 4 on Childhood Adversity (n = 10.034)

Official Cod / Cavorolly (11 = 10,001)			
	OR	95% CI	Wald test
			statistic
			รเสแรแบ
Weekly	1.50*	1.04, 2.17	
Every day	1.98***	1.45, 2.73	
Other drug use past 12 months	1.15	0.88, 1.49	
Depression (CESD score)	1.09***	1.06, 1.13	
Cohabiting but not married	1.21	0.93, 1.58	
Married	1.02	0.82, 1.25	
Number of children	1.23***	1.12, 1.32	
Constant	0.03***	0.01, 0.15	

^a Reference category: White NH

Table 7 shows the pairwise comparisons for childhood adversity and housing stress in Wave 4 and corrected *p* values from the Holm's sequential Bonferroni approach (Abdi, 2010). This is a more stringent test of the relationship that controls for the risk of false positives. We see that after correcting for multiple comparisons, the relationships between experiencing emotional abuse 3 -5 times or more than 10 times in childhood and housing strain in adulthood is no longer significant, suggesting that these results were false positives. However, the effect of experiencing emotional abuse 2 times remained significant.

Table 7Pairwise Comparisons of Child Adversity and Housing Stress in Wave 4

Comparisons*	OR	р	Holm's p
Foster care	1.01	0.97	ns
Physical abuse (ref = none)			
1 time	0.98	0.89	ns
2 times	1.42	0.67	ns
3-5 times	1.08	0.66	ns
6-10 times	1.03	0.92	ns
> 10 times	1.38	0.11	ns
Sexual abuse (ref = none)			
1-2 times	1.02	0.93	ns

^b Reference category: Male

^c Reference category: Less than high school

d Reference category: \$0 - \$15,0000

e Reference category: High school or less

^fReference category: Less than \$1,000

^h Reference category: Less than \$5,000

ⁱ Reference category: No binge drinking past 12 months

Reference category: No marijuana use past 12 months

Table 7Pairwise Comparisons of Child Adversity and Housing Stress in Wave 4

Comparisons*	OR	р	Holm's p
3 or more times	1.28	0.29	ns
Emotional abuse (ref = none)			
1 time	0.99	0.97	ns
2 times	1.60	< 0.001	<0.001
3-5 times	1.44	0.04	ns
6-10 times	0.96	0.83	ns
> 10 times	1.45	0.01	ns
Kicked out of home	1.05	0.62	ns
Ran away	1.21	0.21	ns

*Controlling for demographics, personal socioeconomic status, substance use and mental health at Wave 4

Living Situation in Wave 4

Living with Parents

Table 8 shows the results for living situation in Wave 4. We see that of the measures of childhood adversity, foster care, physical abuse, emotional abuse, and being kicked out of the home were significantly related to the odds of living with parents in Wave 4 rather living in one's own place. Compared to those who indicated no physical abuse in childhood, those who indicated that this occurred 6 - 10 times had 64% lower odds (RRR = 0.34, p < .05) of living with parents compared to living in their own place. Further, compared to those who indicated no emotional abuse, those who indicated 3 - 5 times had 50% lower odds (RRR = 0.50, p < .01), and those who indicated 10 or more times had 47% lower odds (RRR = 0.57, p < .01) of living with parents in adulthood. Those who indicated that they were kicked out of the home also had 33% lower odds (RRR = 0.67, p < .05) of living with parents.

None of the other measures of childhood adversity were significantly associated with odds of living with parents in Wave 4. However, other covariates including race/ethnicity, number of children, parental education, measures of socioeconomic status, binge drinking, and marriage or cohabitation were significantly related to odds of living with parents compared to living in one's

own place. Compared to White Non-Hispanic respondents, those who identified as Hispanic, Black Non-Hispanic, or Asian Non-Hispanic had higher odds of living with parents. Female respondents also had lower odds of living with parents compared to males. Respondents whose parents' highest level of education was some graduate school or higher had lower odds of living with parents than those whose parents' highest level of education was less than high school. Those indicating that they were cohabitating but not married and those who indicated being married had significantly lower odds of living with parents. Higher number of children of respondents was also related to lower odds of living with parents.

Measures of personal socioeconomic status in Wave 4 were also related to odds of living with parents. Household income was important; those with any income category higher than \$15,000 had lower odds of living with parents than those who had a household income of \$15,000 or less. In addition, higher level of educational attainment by Wave 4 was associated with lower odds of living with parents. Debt was also associated with living with parents; the higher the level of debt (compared to less than \$1,000), the higher odds of living with parents. Household assets were also significantly related to living with parents. Those with higher household assets had lower odds of living with parents in Wave 4.

Frequency of binge drinking in the past year was also related to odds of living with parents. Compared to those who indicated no binge drinking in the past 12 months, those who indicated binge drinking 2 or 3 days a month or weekly had significantly lower odds of living with parents.

Living in Another Person's Home

Table 8 also shows the results for living in another (non-parental) person's home compared to living in one's own place. We see that the only measure of childhood adversity that was significantly associated with odds of living in another person's home was emotional abuse.

Compared to those who experienced no emotional abuse, those who indicated that this occurred more than 10 times in their childhood had 32% lower odds (RRR = 0.57, p < .01) of living in another person's home.

No other measures of childhood adversity significantly predicted odds of living in someone else's home, however other covariates were significant predictors. In particular, measures of race/ethnicity; parental education; marriage or cohabitation; and personal socioeconomic status were related to odds of living in someone else's home in Wave 4 compared to living in one's own place. Compared to those who identified as White Non-Hispanic, those who indicated being Asian Non-Hispanic or Other Non-Hispanic had significantly higher odds of living in someone else's home. In addition, compared to those whose parents' highest level of education was less than high school, those whose parents' highest level was some college or some graduate school or more had significantly lower odds of living in someone else's home.

Those who were married and those who were cohabitating but not married also had significantly lower odds of living in someone else's home compared to living in their own place.

Personal socioeconomic status was also significantly related to odds of living in someone else's home. Compared to those whose household income was less than \$15,000 in Wave 4, those whose income was higher had lower odds of living in someone else's home. Personal educational attainment was also significantly related to odds of living in someone else's home. Compared to those whose highest level of education was high school or less, those who indicated having some college, being a college graduate, or having completed graduate school had significantly lower odds of living in someone else's home. Personal debt was also a predictor; compared to those with less than \$1,000 in debt, higher debt was significantly related to higher odds of living in someone else's home compared to living in one's own place.

Table 8Models testing living situation compared to living in own place, regressed on childhood adversity (N =10,034)

).51	95% CI	RRR		
).51		11111	95% CI	
).51				
	0.24, 1.09	1.75	0.72, 3.37	0.11
	,		,	0.28
1.50	0.96, 2.01	0.80	0.43, 1.49	
).91	0.49, 1.54	0.84	0.36, 1.82	
1.01	0.60, 1.97	0.73	0.34, 1.59	
).34*	0.11, 0.81	1.68	0.84, 3.58	
1.16	0.67, 2.06	1.15	0.61, 2.11	
_	,	_	,	0.77
).72	0.37, 1.60	1.17	0.54, 2.70	
	J.O., Z. 1		2 2, 3.00	0.04
1.02	0.78, 1.39	1.21	0.73, 2.09	3. 3 .
	·			
	·			
				0.03
	·		•	0.03
1.07	0.71, 1.02	1.09	0.09, 1.79	0.71
0.06	0.00 1.02	0.00	0.01.1.07	
).90	0.69, 1.03	0.99	0.91, 1.07	
0.00***	4 55 0 00	0.00	0.50.4.07	
	·			
).74	0.53, 1.00	0.74	0.54, 1.01	
	·			
).43*	0.27, 0.68	0.48*	0.25, 0.91	
).55***	0.43, 0.71	0.56**	0.38, 0.84	
).30***	0.23, 0.40	0.60**	0.42, 0.86	
).11***	0.07, 0.15	0.42***	0.28, 0.63	
).42**	0.24, 0.72	0.24**	0.09, 0.70	
).71**	0.57, 0.87	0.56***	0.41, 0.75	
).33***		0.60**	0.42, 0.87	
).16***		0.42***		
1.05	0.81, 1.34	0.25**	0.09, 0.70	
00 00 00 00 00 00 00 00 00 00 00 00	0.72 0.99 0.02 0.89 0.50** 0.88 0.57** 0.07 0.96 0.23*** 0.30*** 0.66 0.74 0.02 0.97 0.77 0.43* 0.43* 0.55*** 0.43* 0.44* 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.42** 0.43** 0.44* 0.44* 0.42** 0.42** 0.42** 0.44*	0.72	0.72 0.37, 1.60 1.17 0.99 0.52, 2.14 1.45 0.02 0.78, 1.39 1.21 0.89 0.64, 1.21 1.03 0.50** 0.34, 0.76 0.91 0.88 0.53, 1.68 0.95 0.57** 0.42, 0.84 0.68* 0.67* 0.46, 0.92 1.12 0.07 0.71, 1.62 1.09 0.96 0.89, 1.03 0.99 0.23*** 1.55, 3.38 0.88 0.37* 1.04, 1.88 1.06 0.30*** 1.92, 5.65 2.74*** 0.66 0.76, 3.61 2.42* 0.74 0.53, 1.00 0.74 0.02 0.74, 1.41 0.73 0.97 0.67, 1.41 0.71 0.77 0.54, 1.08 0.54* 0.43* 0.27, 0.68 0.48* 0.55*** 0.23, 0.40 0.60** 0.11*** 0.07, 0.15 0.42*** 0.71** 0.57, 0.87 0.56*** 0.33*** 0.24, 0.44 0.60** 0.16***	0.72 0.37, 1.60 1.17 0.54, 2.70 0.99 0.52, 2.14 1.45 0.72, 3.05 0.02 0.78, 1.39 1.21 0.73, 2.09 0.89 0.64, 1.21 1.03 0.65, 1.59 0.50** 0.34, 0.76 0.91 0.58, 1.51 0.88 0.53, 1.68 0.95 0.57, 1.72 0.57** 0.42, 0.84 0.68* 0.46, 0.99 0.67* 0.46, 0.92 1.12 0.71, 1.72 0.07 0.71, 1.62 1.09 0.69, 1.79 0.89, 1.03 0.99 0.91, 1.07 0.23*** 1.55, 3.38 0.88 0.56, 1.37 0.37** 1.04, 1.88 1.06 0.74, 1.53 0.30*** 1.92, 5.65 2.74*** 1.60, 4.27 0.66 0.76, 3.61 2.42* 1.21, 5.22 0.74 0.53, 1.00 0.74 0.54, 1.01 0.02 0.74, 1.41 0.73 0.49, 1.07 0.97 0.67, 1.41 0.71 0.45, 1.13 0.77 0.54, 1.08 0.54* 0.31, 0.94

Table 8 Models testing living situation compared to living in own place, regressed on childhood adversity (N =10,034)

Criticinood adversity (N = 10,03		Living with Parents ^a		in Another -Parental) n's Home ^a	Wald test statistic
	RRR	95% CI	RRR	95% CI	
\$1,000 to \$4,999	1.42	0.95, 2.14	2.41**	1.29, 4.52	_
\$5,000 to \$9,999	1.55*	1.07, 2.24	3.38**	1.70, 6.73	
\$10,000 to \$24,999	1.45*	1.01, 2.06	1.77	0.99, 3.14	
\$25,000 to \$49,999	2.25***	1.59, 3.17	2.77**	1.45, 5.29	
\$50,000 to \$99,999	2.34***	1.52, 3.59	2.75**	1.40, 5.42	
\$100,000 or more	2.50***	1.65, 3.78	3.93***	1.93, 7.94	
Assets ^h					
\$5,000 to \$9,999	1.43	0.93, 2.20	1.04	0.62, 1.78	
\$10,000 to \$24,999	1.22	0.82, 1.82	1.00	0.58, 1.72	
\$25,000 to \$49,999	1.83**	1.28, 2.59	1.31	0.82, 2.09	
\$50,000 to \$99,999	4.16***	2.65, 6.53	1.28	0.76, 2.14	
\$100,000 to \$249,000	6.22***	4.07, 9.51	2.86***	1.82, 4.52	
\$250,000 or more	14.64***	9.19, 23.32	2.96**	1.58, 5.57	
Quantity*Frequency of	0.99	0.99, 1.01	0.99	0.99, 1.01	
drinking in past 12 months					
Binge drinking past 12					
months i					
Once a month or less	0.87	0.69, 1.08	1.03	0.74, 1.42	
2 or 3 days a month	0.61*	0.40, 0.92	1.07	0.67, 1.70	
Weekly	0.62*	0.41, 0.93	1.52	0.89, 2.58	
Every day	1.77	0.65, 3.84	2.46	0.59, 10.13	
Marijuana use past 12					
months ^j	0.00	0.05.4.04	4.40	0.75 4.00	
Once a month or less	0.93	0.65, 1.31	1.18	0.75, 1.86	
2 or 3 days a month	0.93	0.43, 1.99	0.87	0.37, 2.08	
Weekly	0.88	0.58, 1.34	0.92	0.49, 1.74	
Every day	1.05	0.67, 1.65	1.07	0.63, 1.82	
Other drug use past 12	1.11	0.77, 1.60	1.31	0.89, 1.93	
months	1.00	0.00 4.00	4.05	0.00 4.44	
Depression (CESD score)	1.02	0.98, 1.06	1.05	0.99, 1.11	
Cohabiting but not married	0.07***	0.05, 0.09	0.62**	0.44, 0.86	
Married	0.06***	0.05, 0.09	0.18***	0.13, 0.29	
Number of children	0.81***	0.73, 0.90	0.90	0.76, 1.06	
Constant	2.05	0.27, 15.43	0.22	0.01, 2.41	

^a Reference category: Living in own place ^b Reference category: White NH

^c Reference category: Male

d Reference category: Less than high school Reference category: \$0 - \$15,0000

f Reference category: High school or less Reference category: Less than \$1,000

^h Reference category: Less than \$5,000

Reference category: No binge drinking past 12 months Reference category: No marijuana use past 12 months

Table 9 shows the pairwise comparisons for childhood adversity and living situation and corrected p values from the Holm's sequential Bonferroni approach (Abdi, 2010). We see that after correcting for multiple comparisons, only one relationship remained significant. After the correction, the relationship between experiencing emotional abuse 3-5 times in childhood remained significantly related to lower odds of living with parents in Wave 4. Lastly, the relationship between experiencing emotional abuse more than 10 times in childhood also remained significantly associated with lower odds of living with parents in Wave 4.

Table 9
Pairwise Comparisons of Child Adversity and Living Situation in Wave 4

Pairwise Comparisons of Child Adversity and Living Situation in Wave 4						
	Li	ving With	Parents ^a	Living ir	n Someone	e Else's Home a
Comparisons b	RRR	р	Holm's p	RRR	р	Holm's p
Foster care	0.51	0.08	ns	1.71	0.14	ns
Physical abuse						
(ref = none)						
1 time	1.50	0.02	ns	0.80	0.49	ns
2 times	0.91	0.77	ns	0.84	0.67	ns
3-5 times	1.01	0.72	ns	0.73	0.44	ns
6-10 times	0.34	0.03	ns	1.68	0.15	ns
> 10 times	1.16	0.57	ns	1.15	0.66	ns
Sexual abuse						
(ref = none)						
1-2 times	0.72	0.32	ns	1.17	0.69	ns
3 or more times	0.99	0.99	ns	1.45	0.33	ns
Emotional abuse						
(ref = none)						
1 time	1.02	0.87	ns	1.21	0.47	ns
2 times	0.89	0.44	ns	1.03	0.94	ns
3-5 times	0.50	0.001	0.015	0.91	0.71	ns
6-10 times	0.88	0.86	ns	0.95	0.85	ns
> 10 times	0.57	0.002	0.03	0.68	0.04	ns
Kicked out of home	0.67	0.02	ns	1.12	0.61	ns
Ran away	1.07	0.72	ns	1.09	0.73	ns

^a Reference category: living in own place

^b Controlling for demographics, personal socioeconomic status, substance use and mental health at Wave 4

Research Question 2: Social Support and Housing Outcomes

Bivariate Analyses

Table 10 shows the unadjusted binomial and multinomial logistic regressions for each independent variable representing social support received in Wave 3 regressed on the two dependent variables of housing-related stress and living situation in Wave 4. We see that compared to receiving no financial support from parents in Wave 3, those who received \$200 - \$499 have significantly different odds of housing-related stress in Wave 4. There is also a significant relationship between receiving \$1,000 or more from parents and odds of housing-related stress, compared to receiving no financial support from parents. Further, compared to not being close at all to a parent in Wave 3, there is a significant difference in odds of housing-related stress among those who indicate being "quite close" and "very close" to a parent in Wave 3. Receipt of social support in Wave 3 is also significantly related to living situation in Wave 4. In particular, receipt of \$200 - \$499 in Wave 3, being "somewhat close" to a mentor, and being "very close" to a mentor are significantly associated with odds of living with parents instead of one's own place in Wave 4. Lastly, being "very close" to a parent in Wave 3 is significantly associated with odds of living in another person's home rather than one's own place in Wave 4.

Table 10Weighted Unadjusted Logistic Regression Models for Main Independent Social Support Variables (n = 10,034)

		ng-Related Stress	(Cor	Living Situation (Compared to Living in One's Own Place)			
				ing With arents		in Another (Non- I) Person's Home	
	OR	95% CI	RRR	95% CI	RRR	95% CI	
Financial support from parents ^a							
\$200 - \$499	1.21*	1.02, 1.43	1.21*	1.01, 1.45	1.03	0.74, 1.44	
\$500 - \$999	0.94	0.76, 1.17	1.16	0.89, 1.53	1.01	0.69, 1.47	
\$1,000 or more	0.57***	0.49, 0.68	1.15	0.95, 1.38	0.80	0.61, 1.05	
Closeness to a parent b							
Somewhat close	0.79	0.52, 1.23	1.53	0.80, 2.89	0.69	0.35, 1.35	
Quite close	0.55**	0.37, 0.79	1.65	0.92, 2.97	0.65	0.36, 1.20	
Very close	0.55**	0.38, 0.80	1.67	0.94, 2.95	0.50*	0.28, 0.90	
Closeness to a mentor b							
Somewhat close	0.92	0.76, 1.11	0.70**	0.55, 0.89	0.85	0.56, 1.28	
Quite close	0.89	0.74, 1.09	0.83	0.69, 1.01	0.93	0.67, 1.29	
Very close	0.98	0.82, 1.18	0.75**	0.63, 0.90	1.05	0.77, 1.43	

^a Reference category: No parental financial support

Housing-Related Stress in Wave 4

Table 11 shows results of the full model testing the relationship between social support in Wave 3 and housing-related stress in Wave 4. We see that parental financial support and closeness to a mentor in Wave 3 are significantly related to housing-related stress in Wave 4. In particular, compared to those receiving no parental financial support in Wave 3, those who received \$200-499 had 37% higher odds of housing-related stress in Wave 4. In addition, compared to those indicating that they were not at all close to a mentor, those who indicated being somewhat close had 29% higher odds of housing-related strain.

No other measures of social support in Wave 3 were related to odds of housing-related stress in Wave 4. However, other covariates were related to odds of housing stress. In particular, race/ethnicity, number of children, measures of socioeconomic status, receipt of welfare in

^b Reference category: Not close at all

^c Reference category: Not close at all

Waves 3 or 4, marijuana use and depression were related to odds of housing stress. Compared to those who identified as White Non-Hispanic, those who identified as Black Non-Hispanic had significantly higher odds of housing stress, which those who identified as Asian Non-Hispanic had lower odds of housing stress. The more children one had, the higher odds of housing stress. Personal educational attainment was also related; compared to those whose highest level of education was high school or less, those who had finished college or graduate school had significantly lower odds of housing stress. Compared to those who had a household income of less than \$15,000, those who had an income of \$30,000 - \$44,999 or \$45,000 - \$150,000 had significantly lower odds of housing stress. Receipt of welfare, food stamps or public assistance in Waves 3 or 4 was significantly related to higher odds of housing stress in Wave 4. Those with higher debt had significantly higher odds of housing stress.

Finally measures of substance use and mental health were significantly associated with odds of housing stress. Compared to those who indicated no marijuana use in the past 12 months, those who indicated using marijuana once per month or less, weekly, or every day had significantly higher odds of housing stress. Lastly, higher scores on the depression scale were associated with higher odds of housing stress.

Table 11
Weighted Logistic Regression for Housing-Related Stress at
Wave 4 on Social Support (N – 10.034)

	OR	95% CI	Wald test statistic
Social Support			
Financial support from parents W3 a			0.05
\$200 - \$499	1.37*	1.09, 1.72	
\$500 - \$999	1.14	0.85, 1.51	
\$1,000 or more	1.01	0.83, 1.22	
Closeness to a parent b			0.42
Somewhat close	1.29	0.72, 2.35	
Quite close	1.01	0.60, 1.66	
Very close	1.02	0.63, 1.65	
		70	

Table 11Weighted Logistic Regression for Housing-Related Stress at Wave 4 on Social Support (N = 10,034)

wave 4 on Social Support (N = 10,00	04)		
	OR	95% CI	Wald test statistic
Closeness to a mentor c			0.05
Somewhat close	1.29*	1.04, 1.59	
Quite close	1.15	0.94, 1.42	
Very close	0.96	0.78, 1.19	
Control Variables		, -	
Age W4	1.04	0.98, 1.09	
Race/ethnicity d		0.00, 1.00	
Hispanic	0.98	0.74, 1.30	
Black NH	1.30*	1.06, 1.59	
Asian NH	0.67	0.42, 1.04	
Other NH	1.37	0.80, 2.35	
Female ^e	1.09	0.92, 1.29	
Parental education ^f	1.03	0.52, 1.25	
High school/GED	1.03	0.82, 1.28	
Some college	0.98	0.76, 1.27	
College graduate	0.89	0.68, 1.18	
Some graduate school or more	1.33	0.93, 1.90	
Household income W4 ^g	1.33	0.93, 1.90	
	1.08	0 00 1 22	
\$15,001 - \$30,000 \$30,001 - \$45,000		0.88, 1.33	
\$30,001 - \$45,000	0.83	0.64, 1.07	
\$45,001 - \$150,000 \$450,001 or more	0.49***	0.35, 0.69	
\$150,001 or more	1.37	0.87, 2.15	
Education W4 h	4.00	0.04.4.00	
Voc ed/ some college	1.02	0.84, 1.23	
College graduate	0.45***	0.33, 0.59	
Completed grad sch	0.38***	0.24, 0.59	
Welfare, public assistance or food	1.93***	1.60, 2.34	
stamps in W3 or W4			
Household debt	4 00 44	4.0=.0.00	
\$1,000 to \$4,999	1.83**	1.25, 2.69	
\$5,000 to \$9,999	2.05***	1.44, 2.92	
\$10,000 to \$24,999	2.33***	1.68, 3.22	
\$25,000 to \$49,999	2.28***	1.55, 3.37	
\$50,000 to \$99,999	2.89***	1.92, 4.36	
\$100,000 or more	3.11***	1.95, 4.96	
Household assets j			
\$5,000 to \$9,999	0.56***	0.42, 0.73	
\$10,000 to \$24,999	0.55****	0.43, 0.71	
\$25,000 to \$49,999	0.39***	0.28, 0.55	
\$50,000 to \$99,999	0.29***	0.23, 0.37	
\$100,000 to \$249,000	0.32***	0.22, 0.45	
\$250,000 or more	0.09***	0.06, 0.15	
Quantity of drinking * Frequency of	1.00	0.99, 1.01	
drinking in past 12 months			
Binge drinking past 12 months k			
Once a month or less	1.08	0.86, 1.36	
2 or 3 days a month	1.01	0.76, 1.33	
Weekly	1.17	0.82, 1.68	
Every day	0.75	0.25, 2.19	
•		, -	

Table 11Weighted Logistic Regression for Housing-Related Stress at Wave 4 on Social Support (N = 10,034)

	OR	95% CI	Wald test statistic
Marijuana use past 12 months			
Once a month or less	1.49**	0.17, 1.90	
2 or 3 days a month	1.53	0.92, 2.53	
Weekly	1.58*	1.09, 2.27	
Every day	2.01***	1.50, 2.70	
Other drug use past 12 months	1.18	0.91, 1.53	
Depression (CESD score)	1.11***	1.08, 1.14	
Cohabiting but not married	1.22	0.93, 1.58	
Married	1.02	0.83, 1.26	
Number of children	1.24***	1.14, 1.34	
Constant	0.03***	0.01, 0.15	

^a Reference category: Less than \$200

Table 12 shows the pairwise comparisons for social support and housing-related stress and corrected *p* values from the Holm's sequential Bonferroni approach (Abdi, 2010). We see that when we correct for multiple comparisons, none of the variables measuring social support remain significantly related to housing stress in Wave 4.

Table 12 Pairwise Comparisons of Social Support and Housing Stress in Wave 4 Comparisons* OR Holm's p Less than \$200 from parents in Wave 3 compared to: \$200 - \$499 0.01 1.37* ns \$500 - \$999 0.28 1.14 ns \$1,000 or more 1.01 0.84 ns Not at all close to a parent in Wave 3 compared to: Somewhat close 1.29 0.42 ns Quite close 0.73 1.01 ns Very close 1.02 0.82 ns

^b Reference category: Not at all close to a parent

^c Reference category: Not at all close to a mentor

d Reference category: White NH

e Reference category: Male

^f Reference category: Less than high school

g Reference category: \$0 - \$15,0000

^h Reference category: High school or less

ⁱ Reference category: Less than \$1,000

^j Reference category: Less than \$5,000

^k Reference category: No binge drinking past 12 months

¹ Reference category: No marijuana use past 12 months

Table 12					
Pairwise Comparisons of Social Support and Housing Stress in Wave 4					
Comparisons*	OR	р	Holm's p		
Not at all close to a mentor in					
Wave 3 compared to:					
Somewhat close	1.29*	0.04	ns		
Quite close	1.15	0.20	ns		
Very close	0.96	0.37	ns		

Living Situation in Wave 4

Living with Parents

Table 13 shows the results of the full model testing the relationship between social support received in Wave 3 and living situation in Wave 4. We see that financial support from parents and closeness to a mentor are significantly related to odds of living with parents, compared to one's own home, in Wave 4. In particular, compared to those who received no financial support from parents in Wave 3, those who received \$1,000 or more had 52% higher odds of living with parents in Wave 4, compared to living in their own place. In addition, compared to those who reported not being close to a mentor, those who indicated being very close to a mentor had about 32% lower odds of living with parents compared to living in their own place.

No other measures of social support were significantly associated with odds of living with parents compared to living in one's own place. However, a number of covariates were significantly related. In particular, race/ethnicity, parental education, number of children, marriage/cohabitation, personal socioeconomic status, and binge drinking were related to odds of living with parents.

Compared to White Non-Hispanics, those who identified as Hispanic (all races), Black Non-Hispanic or Asian Non-Hispanic had significantly higher odds of living with parents compared to living in one's own place. Parent's education in Wave 1 was also important; compared to those whose parents' highest level of education was less than high school, those whose parents had graduate degree had significantly lower odds of living with parents in Wave 4. The higher the respondent's number of children, the lower the odds of living with parents. Being married or cohabitating (but not married) were also significantly associated with lower odds of living with parents.

Personal socioeconomic status also mattered for odds of living with parents. In particular, level of education mattered such that compared to those with the highest level of education as high school or less, those with any further education had significantly lower odds of living with parents. Income in Wave 4 also mattered such that compared to those who made less than \$15,000 in the past year, those with any higher income categories had significantly lower odds of living with parents. Compared to those with debt less than \$1,000, those with higher debt had higher odds of living with parents.

Compared to those who engaged in no binge drinking in the past year, those who binged 2 or 3 days per month or weekly had significantly lower odds of living with parents.

Living in Another Person's Home

Also in Table 13 we see that there are no significant relationships between receipt of social support in Wave 3 and the odds of living in another person's home instead of one's own place in Wave 4. However, several covariates were significantly related to odds of living in someone else's home. In particular, race/ethnicity, gender, parental education, marriage/cohabitation and personal socioeconomic status were significantly related to odds of living in someone else's home. Compared to White Non-Hispanic respondents, those who

indicated that they were Asian Non-Hispanic or "Other" Non-Hispanic had significantly higher odds of living in someone else's home. Female respondents had lower odds of living in someone else's home. Compared to those whose parents' highest level of education was less than high school, those whose parents had a college degree or graduate degree had lower odds of living in someone else's home.

Measures of personal socioeconomic status were also significantly associated with odds of living in someone else's home. Compared to those whose highest education was high school or less, any higher education was associated with lower odds of living in someone else's home. Household income was also important; compared to those whose income was less than \$15,000, all other higher income categories were associated with lower odds of living in someone else's home. Compared to those with less than \$1,000 in debt, those with higher debt had higher odds of living in someone else's home.

Table 13Models testing living situation compared to living in own place, regressed on social support (N =10,034)

	Living	with Parents a		Living in Another (Non-			
			Pare	Parental) Person's I			
	RRR	95% CI	RRR	95% CI	Wald		
					Test		
					Statistic		
Social Support							
Financial support from parents ^b							
\$200 - \$499	1.11	0.87, 1.41	0.84	0.55, 1.29	0.07		
\$500 - \$999	1.16	0.85, 1.59	1.08	0.70, 1.66			
\$1,000 or more	1.52***	1.18, 1.96	1.00	0.69, 1.48			
Closeness to a parent ^c					0.41		
Somewhat close	1.25	0.58, 2.65	0.59	0.27, 1.36			
Quite close	1.64	0.80, 3.39	0.74	0.33, 1.63			
Very close	1.63	0.78, 3.37	0.67	0.31, 1.43			
Closeness to a mentor d					0.01		
Somewhat close	0.76	0.57, 1.03	0.98	0.63, 1.51			
Quite close	0.89	0.67, 1.15	1.34	0.93, 1.94			
Very close	0.68**	0.55, 0.85	1.39	0.95, 1.94			
Control Variables							
Age W4	0.97	0.91, 1.04	0.99	0.92, 1.08			

Table 13
Models testing living situation compared to living in own place, regressed on social support (N =10,034)

(14 = 10,004)	Living with Parents ^a		Living in Another (Non-		
				ntal) Person's	
	RRR	95% CI	RRR	95% CI	Wald
					Test Statistic
Race/ethnicity (ref=NH White)					Otationic
Hispanic	2.32***	1.58, 3.41	0.89	0.57, 1.36	
Black NH	1.61**	1.22, 2.13	1.04	0.72, 1.48	
Asian NH	2.57**	1.51, 4.39	2.73***	1.67, 4.45	
Other NH	1.24	0.60, 2.55	2.36*	1.11, 5.03	
Female (ref = male)	0.74*	0.58, 0.95	0.71*	0.52, 0.97	
Parental education e		,		•	
High school/GED	0.97	0.71, 1.36	0.71	0.47, 1.07	
Some college	0.95	0.66, 1.36	0.69	0.43, 1.12	
College graduate	0.75	0.53, 1.06	0.51*	0.29, 0.90	
Some graduate school or more	0.42***	0.26, 0.66	0.47*	0.24, 0.89	
Household income W4 f		,		•	
\$15,001 - \$30,000	0.56***	0.44, 0.73	0.55**	0.37, 0.82	
\$30,001 - \$45,000	0.31***	0.23, 0.42	0.57**	0.40, 0.83	
\$45,001 - \$150,000	0.11***	0.07, 0.16	0.40***	0.27, 0.59	
\$150,001 or more	0.45**	0.26, 0.76	0.25**	0.09, 0.69	
Education W4 ^g					
Voc ed/ some college	0.66***	0.54, 0.82	0.54***	0.40, 0.72	
College graduate	0.29***	0.22, 0.39	0.36***	0.23, 0.57	
Completed grad school	0.15***	0.09, 0.25	0.26***	0.14, 0.52	
Welfare, public assistance or food	1.08	0.83, 1.41	0.94	0.67, 1.34	
stamps in W3 or W4					
Debt					
\$1,000 to \$4,999	1.37	0.93, 2.02	2.34*	1.23, 4.43	
\$5,000 to \$9,999	1.46*	1.02, 2.10	3.40**	1.72, 6.74	
\$10,000 to \$24,999	1.46*	1.00, 2.03	1.79*	1.00, 3.23	
\$25,000 to \$49,999	2.08***	1.48, 2.91	2.79**	1.45, 5.42	
\$50,000 to \$99,999	2.32*** 2.51***	1.51, 3.58	2.68** 3.97***	1.34, 5.34	
\$100,000 or more	2.51	1.66, 3.77	3.97	1.96, 8.05	
Assets \$5,000 to \$9,999	1.39	0.91, 2.11	1.03	0.61, 1.75	
\$10,000 to \$9,999 \$10,000 to \$24,999	1.39	0.82, 1.82	0.97	0.51, 1.75	
\$25,000 to \$49,999	1.86***	1.32, 2.63	1.25	0.78, 2.02	
\$50,000 to \$99,999	4.13***	2.59, 6.57	1.26	0.75, 2.09	
\$100,000 to \$249,000	6.46***	4.26, 9.78	2.74***	1.75, 4.30	
\$250,000 or more	14.37***	0.90, 22.85	2.92**	1.57, 5.42	
Quantity of drinking * Frequency of	1.08	0.84, 1.41	0.99	0.99, 1.01	
drinking in past 12 months		.,			
Binge drinking past 12 months					
Once a month or less	0.78	0.62, 1.00	1.01	0.73, 1.41	
2 or 3 days a month	0.63*	0.42, 0.95	1.10	0.69, 1.75	
Weekly	0.53**	0.34, 0.83	1.50	0.89, 2.54	
Every day	1.06	0.36, 3.06	2.29	0.58, 9.09	
Marijuana use past 12 months					
Once a month or less	0.85	0.60, 1.18	1.19	0.75, 1.87	
2 or 3 days a month	0.88	0.42, 1.86	0.93	0.38, 2.23	

Table 13 Models testing living situation compared to living in own place, regressed on social support (N=10,034)

-	Living with Parents ^a		Living in Another (Non-		
	-		Parental) Person's Home a		
	RRR	95% CI	RRR	95% CI	Wald
					Test
					Statistic
Weekly	0.87	0.58, 1.31	0.91	0.48, 1.68	
Every day	1.03	0.68, 1.56	1.09	0.65, 1.85	
Other drug use past 12 months	1.06	0.73, 1.52	1.28	0.88, 1.88	
Depression (CESD score)	1.02	0.98, 1.05	1.04	0.99, 1.10	
Cohabiting but not married	0.06***	0.05, 0.09	0.59**	0.43, 0.83	
Married	0.05***	0.03, 0.06	0.16***	0.09, 0.26	
Number of children	0.82***	0.84, 0.91	0.89	0.76, 1.06	
Constant	0.86	0.11, 6.75	0.25	0.02, 3.10	

^a Reference category: White NH

Table 14 shows the pairwise comparisons for social support in Wave 3 and living situation in Wave 4 and corrected *p* values from the Holm's sequential Bonferroni approach (Abdi, 2010). We see that when we correct for multiple comparisons, financial support and closeness to a mentor remain significantly associated with odds of living with parents in Wave 4. In particular, compared to those receiving no financial support from parents in Wave 3, those who received \$1,000 or more have 62% higher odds of living with parents in Wave 4, compared to living in their own place. In addition, those who report having a very close relationship with a mentor have 28% lower odds of living with parents in Wave 4.

^b Reference category: Male

^c Reference category: Less than high school

^d Reference category: \$0 - \$15,0000

e Reference category: High school or less

f Reference category: Less than \$1,000

h Reference category: No binge drinking past 12 months

Reference category: No marijuana use past 12 months

Reference category: No other drug use past 12 months

Table 14Pairwise Comparisons of Social Support and Living Situation in Wave 4

·	Living With Parents			Living in Someone Else's		
	_			Home		
Comparisons	RRR	р	Holm's	RRR	р	Holm's p
			р			
No financial support from						
parents compared to:						
\$200 - \$499	1.11	0.24	ns	0.84	0.44	ns
\$500 - \$999	1.16	0.42	ns	1.08	0.71	ns
\$1,000 or more	1.52	0.001	0.009	1.00	0.98	ns
Not close at all to a						
parent compared to:						
Somewhat close	1.25	0.82	ns	0.59	0.19	ns
Quite close	1.64	0.22	ns	0.74	0.45	ns
Very close	1.63	0.24	ns	0.67	0.29	ns
Not close at all to a						
mentor compared to:						
Somewhat close	0.76	0.19	ns	0.98	0.93	ns
Quite close	0.89	0.49	ns	1.34	0.12	ns
Very close	0.68	0.004	0.03	1.39	0.09	ns

Research Question 3: Childhood Adversity, Social Support, and Housing Outcomes

An analysis of the moderating effects of social support on the relationship between measures of childhood adversity and housing outcomes in Wave 4 was conducted. Only those measures of childhood adversity or social support that were significantly associated to housing-related stress or living situation in Wave 4 were included in the interaction models. Therefore, below we see the results for 1) housing stress on emotional abuse*parental financial support, 2) living situation on emotional abuse*parental financial support, 3) housing stress on emotional abuse*closeness to a mentor, and 4) living situation on emotional abuse*closeness to a mentor. Findings for the latter two relationships, which found non-significant results, can be found in Appendix A due to non-significant results.

Housing-Related Stress on Emotional Abuse * Parental Financial Support

Table 15 shows results of the full model for housing-related stress in Wave 4 on the interaction between emotional abuse in childhood and social support in Wave 3. Among those

who received \$200-\$499 from parents at age 18 – 26 and experienced no emotional abuse, the odds of housing stress are higher than those who received no financial support and were not emotionally abused. We also see that among those who experienced emotional abuse 1 -2 times, the chances of housing stress differ by receipt of financial assistance from parents at ages 18 – 26, with those receiving \$200 - \$499 or \$500 - \$999 having much lower likelihood of housing stress by ages 26 – 32 compared with those who received no money from parents. Finally, among those who had high emotional abuse (3 or more times) and received no financial support from parents, odds of housing stress were 50% higher than those who experienced no emotional abuse.

Table 15Housing-Related Stress in Wave 4 Regressed on the Interaction Between Childhood Emotional Abuse and Financial Support from Parents in Wave 3 (N = 10,034)

	OR	95% CI
Financial support from parents ^a		
\$200 - \$499	1.59**	1.37, 2.24
\$500 - \$999	1.38	0.93, 2.06
\$1,000 or more	1.15	0.89, 1.49
Emotional abuse ^b		
1-2 times	1.95***	1.38, 2.76
3 or more times	1.51**	1.14, 1.99
Emotional abuse x financial support		
1-2 times abused * \$200-499	0.34***	0.19, 0.59
3 or more times * \$200-499	1.36	0.80, 2.04
1-2 times abused * \$500-999	0.49*	0.26, 0.94
3 or more times * \$500-999	0.88	0.50, 1.54
1-2 times abused * \$1,000 or more	0.67	0.42, 1.08
3 or more times * \$1,000 or more	0.87	0.58, 1.30
Control Variables		
Age W4	1.04	0.99, 1.09
Race/ethnicity ^c		
Hispanic	0.94	0.71, 1.23
Black NH	1.29*	1.06, 1.58
Asian NH	0.67	0.43, 1.05
Other NH	1.31	0.77, 2.22
Female d	1.05	0.88, 1.25
Parental education e		
High school/GED	0.99	0.79, 1.25
Some college	0.94	0.73, 1.23
-		

Table 15 Housing-Related Stress in Wave 4 Regressed on the Interaction Between Childhood Emotional Abuse and Financial Support from Parents in Wave 3 (N = 10,034)

Support from Parents in wave 3 (N = 1		050/ CI
Callana maduata	OR	95% CI
College graduate	0.86	0.65, 1.14
Some graduate school or more	1.28	0.89, 1.83
Household income Wave 4 f		
\$15,001 - \$30,000	1.07	0.87, 1.32
\$30,001 - \$45,000	0.84	0.64, 1.08
\$45,001 - \$150,000	0.49***	0.35, 0.69
\$150,001 or more	1.38	0.86, 2.21
Education W4 ^g		
Voc ed/ some college	1.01	0.84, 1.22
College graduate	0.45***	0.34, 0.60
Completed grad school	0.37***	0.24, 0.59
Welfare, public assistance or food	1.92***	1.58, 2.33
stamps in W3 or W4		
Household debt W4 h		
\$1,000 to \$4,999	1.81**	1.23, 2.66
\$5,000 to \$9,999	2.00***	1.40, 2.85
\$10,000 to \$24,999	2.29***	1.65, 2.85
\$25,000 to \$49,999	2.27***	1.55, 3.33
\$50,000 to \$99,999	2.85***	1.89, 4.28
\$100,000 or more	3.08***	1.93, 4.91
Household assets i		
\$5,000 to \$9,999	0.54***	0.41, 0.72
\$10,000 to \$24,999	0.54***	0.43, 0.71
\$25,000 to \$49,999	0.38***	0.27, 0.54
\$50,000 to \$99,999	0.28***	0.22, 0.26
\$100,000 to \$249,000	0.32***	0.22, 0.45
\$250,000 or more	0.09***	0.05, 0.14
Quantity * frequency of drinking in	1.00	0.99, 1.00
past 12 months		
Binge drinking past 12 months j		
Once a month or less	1.07	0.86, 1.34
2 or 3 days a month	1.00	0.76, 1.33
Weekly	1.16	0.80, 1.67
Every day	0.69	0.24, 2.02
Marijuana use past 12 months k		
Once a month or less	1.51**	1.18, 1.92
2 or 3 days a month	1.00	0.76, 1.33
Weekly	1.16	0.80, 1.67
Every day	0.69	0.24, 2.03
Other drug use past 12 months	1.16	0.89, 1.51
Depression (CESD score)	1.09***	1.06, 1.13
Cohabiting but not married	1.21	0.93, 1.57
Married	1.01	0.81, 1.26
Number of children	1.23***	1.14, 1.34
Constant	0.03***	0.01, 1.11
3 Deference enterent Less than \$200		

^a Reference category: Less than \$200
^b Reference category: No childhood emotional abuse
^c Reference category: White NH

d Reference category: Male

Table 15
Housing-Related Stress in Wave 4 Regressed on the Interaction Between Childhood Emotional Abuse and Financial Support from Parents in Wave 3 (N = 10,034)

OR 95% CI

- ^e Reference category: Less than high school
- f Reference category: \$0 \$15,0000
- ⁹ Reference category: High school or less
- h Reference category: Less than \$1,000
- Reference category: Less than \$5,000
- Reference category: No binge drinking past 12 months
- k Reference category: No marijuana use past 12 months
- Reference category: No other drug use past 12 months

Table 16 shows the results of the correction for multiple comparisons between different levels of emotional abuse and financial support using the Holm Bonferonni approach. Those who experienced moderate emotional abuse (1 – 2 times) and received \$200 - \$499 from parents in Wave 3 have about 66% lower odds of experiencing housing stress compared to those who experienced no emotional abuse and received less than \$200. Those who experienced no emotional abuse and received \$200 - \$499 experienced almost 3 times higher odds of housing stress in Wave 4 compared to those who experienced moderate emotional abuse and received less than \$200 in Wave 3. Those who experienced high emotional abuse (3 or more times) and received \$200 - \$499 from parents in Wave 3 experienced four times higher odds of housing stress compared with those who experienced moderate emotional abuse and received less than \$200 in Wave 3. Finally, those who experienced moderate emotional abuse and received \$200 - \$499 have 75% lower odds of housing stress compared to those who experienced high emotional abuse and received less than \$200 from parents in Wave 3.

Table 16Pairwise Comparisons of Interaction Effects of Financial Support and Emotional Abuse and Housing Stress in Wave 4

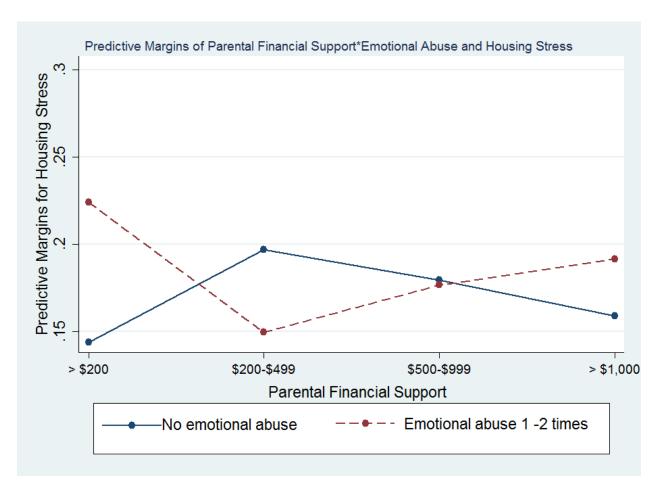
and nousing Stress in wave 4			
Comparisons*	OR	р	Holm's p
No emotional abuse x Less than \$200			
compared to			
1-2 times abused * \$200-499	0.34	<.001	<.006
3 or more times * \$200-499	1.36	0.18	ns
1-2 times abused * \$500-999	0.49	0.031	ns
3 or more times * \$500-999	0.88	0.664	ns
1-2 times abused * \$1,000 or more	0.67	0.097	ns
3 or more times * \$1,000 or more	0.87	0.503	ns
Moderate emotional abuse x Less than \$200			
compared to			
No emotional abuse x \$200-499	2.95	<.001	<.006
3 or more times x \$200-\$499	4.04	<.001	<.005
No emotional abuse x \$500-\$999	2.02	0.031	ns
3 or more times x \$500-\$999	1.77	0.121	ns
No emotional abuse x \$1,000 or more	1.48	0.097	ns
3 or more times x \$1,000 or more	1.29	0.325	ns
High emotional abuse x Less than \$200			
No emotional abuse x \$200-499	0.73	0.178	ns
1-2 times abused x \$200-\$499	0.25	<.001	<.006
No emotional abuse x \$500-\$999	1.13	0.664	ns
1-2 times abused x \$500-\$999	0.56	0.121	ns
No emotional abuse x \$1,000 or more	1.15	0.503	ns
1-2 times abused x \$1,000 or more	0.77	0.325	ns

^{*}Controlling for demographics, personal socioeconomic status, substance use and mental health at Wave 4

Figure 3 presents the predictive probabilities for housing stress in a graph in order to visually depict the interaction effects of emotional abuse and parental financial support. Among those who were not emotionally abused, the predicted probability of housing stress with less than \$200 in parental financial support is 0.14 (95% CI = [0.12, 0.16]), but the probability increases to 0.19 (95% CI = [0.16, 0.22]) among those who received \$200 - \$499. However, among those who were moderately emotionally abused (1 – 2 times), the probability of housing stress among those who received no parental financial support is 0.22 (95% CI = [0.19, 0.26]), while the probability decreases with \$200 - \$499 to 0.15 (95% CI = [0.11, 0.18]). Among those who

experienced high emotional abuse, there were no statistically significant differences in predictive margins between different levels of parental financial support.

Figure 3. Predictive Margins of Parental Financial Support*Emotional Abuse and Housing Stress



Living Situation on Emotional Abuse * Parental Financial Support

Table 17 shows results of the full model for living situation in Wave 4 on the interaction between emotional abuse in childhood and parental financial support in Wave 3. We see that among those who experienced emotional abuse three or more times, the chances of living with parents compared to living in one's own place increase with receipt of financial assistance from parents at ages 18 - 26. However, when those who were highly emotionally abused receive \$500 - \$999 from a parent at ages 18 - 26, they are *more* likely to live with parents at ages 26 - 32 than those who received \$500 - \$999 but had no emotional abuse.

Table 17Living Situation in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Parental Financial Support in Wave 3 (N = 10,034)

	Living with Parents ^a		Living in Another (Non-Parental) Person's Home ^a	
	RRR	95% CI	RRR	95% CI
Social Support				
Financial support from parents b				
\$200 - \$499	0.98	0.72, 1.35	0.79	0.42, 1.51
\$500 - \$999	0.91	0.55, 1.50	0.97	0.51, 1.86
\$1,000 or more	1.23	0.87, 1.73	1.13	0.64, 2.01
Emotional abuse ^c				
1-2 times	0.96	0.67, 1.39	0.94	0.44, 1.99
3 or more times	0.35***	0.22, 0.58	1.08	0.70, 1.67
Emotional abuse x financial support				
1-2 times abused * \$200-499	0.87	0.42, 1.82	1.79	0.60, 5.35
3 or more times * \$200-499	1.95	0.92, 4.14	0.59	0.19, 1.82
1-2 times abused * \$500-999	0.64	0.29, 1.41	1.94	0.65, 5.81
3 or more times * \$500-999	3.84**	1.54, 9.53	0.68	0.27, 1.69
1-2 times abused * \$1,000 or more	1.42	0.75, 2.69	0.74	0.22, 2.48
3 or more times * \$1,000 or more	1.73	0.89, 3.35	0.74	0.35, 1.62
Control Variables				
Age W4	0.97	0.91, 1.04	0.98	0.91, 1.07
Race/ethnicity d				
Hispanic	2.34***	1.62, 3.46	0.89	0.57, 1.37
Black NH	1.53**	1.16, 2.02	1.05	0.74, 1.49
Asian NH	2.72**	1.55, 4.76	2.59***	1.57, 4.30
Other NH	1.39	0.63, 3.08	2.18*	1.07, 4.44
Female ^e	0.74*	0.58, 0.94		
Parental education ^f				
High school/GED	0.97	0.70, 1.35	0.74	0.49, 1.11

Table 17Living Situation in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Parental Financial Support in Wave 3 (N = 10,034)

	Living with Parents ^a		Living in Another (Non-Parental)	
	RRR	95% CI	RRR	Home a
Some college	0.94	0.65, 1.37	0.72	95% CI 0.45, 1.15
<u> </u>				
College graduate	0.73	0.51, 1.05	0.53*	0.30, 0.93
Some graduate school or more	0.39***	0.25, 0.63	0.50*	0.26, 0.95
Household income in W4 ^g	0 ==+++	0.40.0.74	0 50++	0.07.004
\$15,001 - \$30,000	0.55***	0.43, 0.71	0.56**	0.37, 0.84
\$30,001 - \$45,000	0.30***	0.23,0.39	0.58**	0.41, 0.84
\$45,001 - \$150,000	0.11***	0.07, 0.15	0.41***	0.27, 0.61
\$150,001 or more	0.45**	0.26, 0.78	0.24**	0.08, 0.68
Education W4 h	0.0044		0 = 4+++	
Voc ed/ some college	0.69**	0.56, 0.87	0.54***	0.41, 0.73
College graduate	0.31***	0.22, 0.41	0.37***	0.23, 0.58
Completed grad school	0.16***	0.09, 0.27	0.27***	0.14, 0.53
Welfare, public assistance or food	1.06	0.82, 1.37	0.96	0.68, 1.37
stamps in W3 or W4				
Household debt W4 i	4.40	0.00.040	0.04**	4.05.4.00
\$1,000 to \$4,999	1.48	0.99, 2.19	2.31**	1.35, 4.26
\$5,000 to \$9,999	1.56*	1.08, 2.27	3.35***	1.72, 6.54
\$10,000 to \$24,999	1.51*	1.06, 2.15	1.74	0.98, 3.08
\$25,000 to \$49,999	2.22***	1.58, 3.12	2.72**	1.42, 5.23
\$50,000 to \$99,999	2.41***	1.56, 3.72	2.60**	1.32, 5.15
\$100,000 or more	2.82***	1.89, 4.18	3.75***	1.86, 7.55
Household assets W4 j	4.40	0.04.040	4.00	0.50 4.70
\$5,000 to \$9,999	1.43	0.94, 2.19	1.02	0.59, 1.73
\$10,000 to \$24,999	1.24 1.90***	0.82, 1.86	0.99 1.27	0.58, 1.67
\$25,000 to \$49,999	4.26***	1.34, 2.70	1.27	0.79, 2.05
\$50,000 to \$99,999 \$100,000 to \$249,000	4.26 6.35***	2.72, 6.69 4.19, 9.61	1.27 2.75***	0.76, 2.12 1.76, 4.32
\$250,000 to \$249,000 \$250,000 or more	14.30	8.97, 22.78	3.00**	1.61, 5.62
Quantity * frequency of drinking in past	0.99	0.99, 1.00	0.99	0.99, 1.00
12 months	0.99	0.99, 1.00	0.99	0.99, 1.00
Binge drinking past 12 months k				
Once a month or less	0.79*	0.63, 0.99	1.01	0.73, 1.41
2 or 3 days a month	0.75	0.43, 0.97	1.08	0.69, 1.69
Weekly	0.55*	0.35, 0.86	1.51	0.89, 2.56
Every day	1.22	0.42, 3.56	2.44	0.62, 9.57
Marijuana use past 12 months ¹	1.22	0.42, 0.00	2. ¬¬	0.02, 0.07
Once a month or less	0.87	0.62, 1.23	1.19	0.76, 1.87
2 or 3 days a month	0.91	0.42, 1.97	0.89	0.37, 2.16
Weekly	0.92	0.62, 1.39	0.86	0.48, 1.63
Every day	1.02	0.67, 1.57	1.05	0.62, 1.81
Other drug use past 12 months ^m	1.07	0.74, 1.54	1.31	0.89, 1.91
Depression (CESD score)	1.03	0.98, 1.07	1.05	0.99, 1.11
Cohabiting but not married	0.06***	0.05, 0.09	0.61**	0.44, 0.85
Married	0.05***	0.03, 0.06	0.16***	0.10, 0.27
Number of children	0.81***	0.73, 0.90	0.91	0.77, 1.06
Constant	1.45	0.20, 10.33	0.22	0.02, 2.51
Ourotant	1.40	0.20, 10.33	0.22	U.UZ, Z.U I

Table 17Living Situation in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Parental Financial Support in Wave 3 (N = 10,034)

Living w	ith Parents a	Living in Another		
		(Non-Pa	arental)	
		Person'	s Home ^a	
RRR	95% CI	RRR	95% CI	

- ^a Reference category: Living in own place
- ^b Reference category: Less than \$200
- ^c Reference category: No childhood emotional abuse
- d Reference category: White NH
- ^e Reference category: Male
- ^f Reference category: Less than high school
- ⁹ Reference category: \$0 \$15,0000
- h Reference category: High school or less
- Reference category: Less than \$1,000
- Reference category: Less than \$5,000
- ^k Reference category: No binge drinking past 12 months
- ¹ Reference category: No marijuana use past 12 months
- ^m Reference category: No other drug use past 12 months

Table 18 shows the results of the correction for multiple comparisons between different levels of emotional abuse and financial support using the Holm Bonferonni approach and likelihood of living with parents compared to living in one's own place. We see that those who experienced high emotional abuse (3 or more times) and received \$500 to \$999 from parents at age 18 – 26 had 3.84 higher odds of living with parents than those who experienced no emotional abuse and received less than \$200. In addition, those who experienced high emotional abuse and received \$500 to \$999 from parents had 6 times higher odds of living with parents compared to those who experienced moderate emotional abuse and received less than \$200 in parental financial support. Those who experienced no emotional abuse and received \$500 - \$999 from parents had 74% lower odds of living with parents compared to those who experienced high emotional abuse and received less than \$200. Lastly, those who experienced emotional abuse 1 – 2 times in childhood and received \$500 - \$999 in parental financial support had 84% lower odds

of living with parents compared to those who experienced high emotional abuse and less than \$200 in parental financial support.

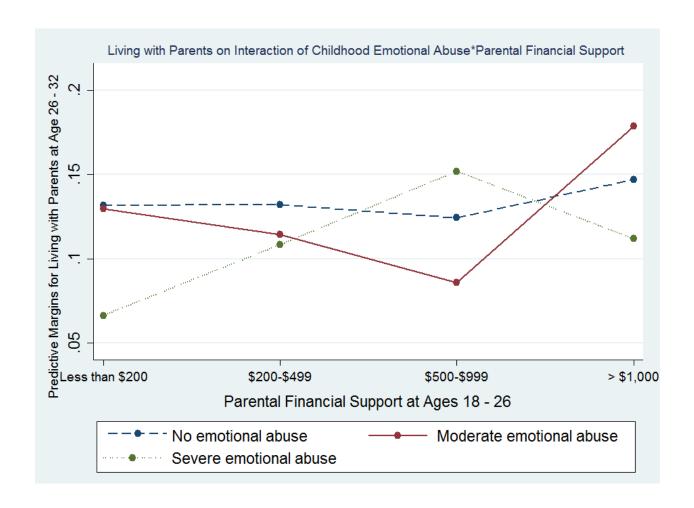
Table 18Comparisons of Significant Interaction Effects of Financial Support and Emotional Abuse and Living With Parents (Compared to in Own Place) in Wave 4

Comparisons*	RRR	p	Holm's p
No emotional abuse x Less than \$200			
compared to			
1-2 times abused * \$200-499	0.87	0.712	ns
3 or more times * \$200-499	1.95	0.079	ns
1-2 times abused * \$500-999	0.64	0.264	ns
3 or more times * \$500-999	3.84	0.004	0.024
1-2 times abused * \$1,000 or more	1.42	0.281	ns
3 or more times * \$1,000 or more	1.73	0.101	ns
Moderate emotional abuse x Less than \$200			
compared to			
No emotional abuse x \$200-499	1.14	0.712	ns
3 or more times x \$200-\$499	2.24	0.081	ns
No emotional abuse x \$500-\$999	1.56	0.264	ns
3 or more times x \$500-\$999	6.00	<.001	<.006
No emotional abuse x \$1,000 or more	0.70	0.281	ns
3 or more times x \$1,000 or more	1.22	0.588	ns
High emotional abuse x Less than \$200			
No emotional abuse x \$200-499	0.51	0.079	ns
1-2 times abused x \$200-\$499	0.45	0.081	ns
No emotional abuse x \$500-\$999	0.26	0.004	0.020
1-2 times abused x \$500-\$999	0.16	<.001	<.006
No emotional abuse x \$1,000 or more	0.57	0.101	ns
1-2 times abused x \$1,000 or more	0.82	0.588	ns

^{*}Controlling for demographics, personal socioeconomic status, substance use and mental health at Wave 4

Figure 4 presents the predictive probabilities for living with parents (compared to living in one's own place) in a graph in order to visually depict the interaction effects of emotional abuse and parental financial support. Among those who experienced emotional abuse 3 or more times in childhood, the predicted probability of living with parents at ages 26 - 32 is 0.06 (95% CI = [0.05, 0.09]) with no receipt of parental financial support at ages 18 - 26. However, for those who experienced emotional abuse 3 or more times the probability of living with parents increases to 0.10 (95% CI = [0.07, 0.14]) with receipt of \$200 - \$499 at ages 18 - 26 and to 0.15 (95% CI = [0.10, 0.20]) with receipt of \$500 - \$999.

Figure 4. Predictive Margins for Living with Parents (Compared to in Own Place) on the Interaction of Childhood Emotional Abuse* Parental Financial Support



CHAPTER 6: DISCUSSION AND CONCLUSIONS

This study examined the relationship between childhood adversity, social support received in the transition to adulthood, and housing stress and living arrangements in adulthood. This study hypothesized that childhood adversity (including foster care involvement; childhood physical, sexual and emotional abuse; running away, or being kicked out of home) may lead to higher housing stress (trouble paying rent/utilities or recent eviction) or lower likelihood of independent housing. The study also hypothesized that higher social support received in the transition to adulthood (measured by parental financial support, closeness to a parent, and closeness to a mentor) would be related to lower levels of housing stress and higher levels of housing independence. This study also assessed whether the relationship between measures of childhood adversity and odds of housing stress and housing independence in adulthood would differ by type and level of social support received in the transition to adulthood.

Major findings

- Reporting emotional abuse in childhood was significantly associated with higher likelihood of experiencing housing stress (as indicated by trouble paying rent/utilities or recent eviction) in adulthood (ages 26-32).
- 2. Reporting emotional abuse in childhood was associated with being significantly less likely to live with parents in adulthood, compared to living in one's own place.
- 3. After correcting for multiple comparisons, there were no significant associations between social support received in the transition to adulthood (ages 18 26) and housing stress (as indicated by trouble paying rent/utilities or recent eviction) in adulthood.

- 4. Compared to those who received less than \$200 from parents in a 12-month period in the transition to adulthood, those who received \$1,000 or more had significantly higher likelihood of living with parents in adulthood (ages 26 32) versus living in one's own place.
- 5. Among those who reported moderate emotional abuse in childhood, the likelihood of experiencing housing stress at ages 26 32 were conditional on financial support from parents at ages 18 26. Those who experienced emotional abuse 1 2 times and received \$200 \$499 from parents had significantly lower odds of housing stress by ages 26 32 compared with those who experienced abuse 1 2 times and received no money from parents.
- 6. The relationship between childhood emotional abuse and likelihood of living with parents at ages 26 32 (compared to living in one's own place) was conditional on parental financial support in the transition to adulthood (ages 18 26). Those who experienced a high amount of childhood emotional abuse and received \$500 \$999 from parents at ages 18 26 had a higher likelihood of living with parents six years later, compared to those who experienced a high amount of emotional abuse and did not receive any parental financial support.

Research Question 1: Does history of foster care involvement, running away in adolescence, being kicked out of home, or frequency of incidents of child maltreatment (physical, emotional, or sexual abuse) directly relate to housing outcomes in adulthood (ages 26-32)?

The results from the first research question partially support the hypothesis that forms of childhood adversity relate to housing outcomes in adulthood. In particular, after correcting for

multiple comparisons, reporting childhood emotional abuse was related to higher likelihood of experiencing housing stress and independent living in adulthood. Emotional abuse is the most under-reported and least studied form of childhood abuse (Barnet, Miller-Perrin, & Perrin, 2005). Thus this type of abuse may have important influences on adult outcomes in isolation of other forms of maltreatment, but these effects remain largely unknown. In the case of this study, emotional abuse may increase housing instability, as measured by difficulty paying rent/mortgage/utilities or eviction within the past 12 months.

Specifically, reporting childhood emotional abuse was related to being more likely to experience housing stress in adulthood. Although emotional abuse has not been directly studied in relation to housing outcomes, childhood emotional abuse can affect children's development of positive social skills and emotion regulation (Charuvastra & Cloitre, 2008), which can in turn impact ability to handle other stressful situations and develop positive relationships with others (Powers, Ressler, & Bradley, 2009). However, a more direct link between emotional abuse and experiencing housing stress may be due to the lack of visibility and awareness around emotional abuse. Since the psychological injuries imparted on an emotionally abused child are not visible, the problem is often unrecognized by others (Herrenkohl, 1990). When the abuse goes unrecognized for a period of time, this may be a lost opportunity for intervention by other adults in the child's life and thus contribute to the development of a chronic stressor. Additionally, this type of abuse may fail to come to the attention of the child welfare system, which could have provided support to the child and/or removed the child from their home so that further damage could not be done. In the longer term, the young person may blame him or herself or misunderstand the abuse, and therefore this emotional abuse can remain a significant stressor in the transition to adulthood and beyond (Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003).

Young people who reported childhood emotional abuse were less likely to live with parents in adulthood compared to living in their own place. This relationship was relatively unsurprising, given that the emotional abuse was likely perpetrated by a parent. Individuals with histories of emotional abuse perpetrated by a parent may have poorer adult relationships with these parents and therefore lack the ability or willingness to rely on parents in adulthood as is relatively more normative in the general population (Furstenberg, 2010).

The remaining forms of childhood adversity studied (including foster care involvement; childhood physical, sexual and emotional abuse; running away, or being kicked out of home) were not related to housing stress (difficulty paying rent/mortgage/utilities or recent eviction) or living situation (living with parents, someone else's home, or own place). Given that other adverse childhood experiences can lead to challenges in a range of domains in adulthood (e.g., Allen, 2008; Huang et al., 2011), it was hypothesized that these experiences would be related to higher levels of housing stress and differential levels of independent housing. However, after correcting for multiple comparisons, none of these measures remained significantly related to housing stress or living situation. The reason for this lack of relationship could be due to several factors. First, it is possible that controlling for other forms of childhood adversity, foster care, physical abuse, sexual abuse, running away or being kicked out of the home are not independently associated with adult housing circumstances and prior findings regarding the relationship between these experiences and risk of homelessness did not control for other forms of childhood adversity. Indeed, an increasing body of research supports the fact that, while other forms of abuse tend to co-occur, emotional abuse more frequently occurs in isolation of other forms of abuse (Spertus et al., 2003). Second, as mentioned above, emotional abuse is the most likely to go unaddressed and unreported due to its visibility; in contrast experiences such as

foster care entry, which is typically the result of child abuse or neglect, would remove the child from the source of abuse and hopefully address the consequences of the abuse through counseling and other resources (Burns et al., 2004). Another possible reason that sexual and physical abuse were not significantly associated with housing stress or living situation may have been due to the lower incidence of sexual and physical abuse. These forms of child abuse occur less frequently than emotional abuse, and therefore may be more difficult to detect in large population-based studies (Gilbert et al, 2009).

Research Question 2: Is social support (measured by closeness to a parent or mentor and financial support from a parent) in the transition to adulthood related to housing instability in adulthood?

Results from the second research question partially support the hypothesis that social support receipt in the transition to adulthood would be related to housing stress and independent living arrangements in adulthood. Findings do not support the hypothesis that measures of social support are related to likelihood of experiencing housing stress. However, findings partially support the hypothesis that certain forms of support received in the transition to adulthood are related to living arrangements in adulthood. In particular, those who received significant financial support from a parent in the transition to adulthood (18-26) had higher odds of living with a parent or parents in adulthood (26-32). In addition, those who were very close to a (non-parental) mentor in the transition to adulthood had lower likelihood of living with parents about six years later.

That there were no significant relationships between social support receipt in the transition to adulthood and housing stress about six years later was puzzling. There are a number of possible reasons why these relationships were not significant. First, it is possible that the beneficial effect of having a mentor does not last beyond the transition to adulthood. Further, mentors may have

limits in the capacity to protect young adults from challenges in some domains (DuBois & Silverthorn, 2005). We know that parents give more economic support to offspring who are in need (Fingerman et al., 2012) and that parental financial support could have occurred because of the financial problems of adult children (Aquilino, 2006).

Young adults are more likely to live with parents in adulthood in times of financial strain, career change or break up of a marriage or cohabitation (Goldsheider & Goldsheider, 1993). More recent data suggests that high student debt, particularly among those of the Millennial generation, is related to higher likelihood of living with parents in young adulthood (Bleemer, Brown, Lee, & van der Klaauw, 2014). Further, young people with higher income potential have lower likelihood of living with parents than those with lower earning potential (Kaplan, 2012). Therefore, in this study the relationship between financial assistance from parents in the transition to adulthood (Wave 3) and higher likelihood of living with parents approximately six years later (Wave 4) may be explained by financial need or economic strain of respondents across the two waves. Those whose parents gave them significant financial assistance in the transition to adulthood may have needed that assistance due to economic strain that then persisted into their late twenties and early thirties. An alternative explanation is that those who received financial assistance did so because they have delayed traditional markers of adulthood (such as independence) to pursue further education (Aquilino, 2006), and then moved in with parents simultaneously or later on (Wave 4) to ease their economic burden associated with career development. Unfortunately, we don't know if it was the financial assistance that influenced the living arrangements, the converse of that relationship, or some other unmeasured factor that was related to both.

Those who reported being very close to a mentor in the transition to adulthood had lower likelihood of living with parents approximately six years later compared to living in their own place. While it is unclear whether living with parents in the late twenties and early thirties is beneficial or detrimental to individuals, independent living beyond the transition to adulthood is a current "normative" developmental task (Furstenberg, 2010). Therefore, it may be that having a close relationship with a mentor in the transition to adulthood provides important resources to young people that can lead to economic and residential independence. Having a close relationship with a mentor may also be indicative of a greater social network more generally or better use of one's existing social network (Rhodes, Ebert & Fischer, 1992). We know that informal social connections can lead to connections to employment (Ioannides & Loury, 2004), and it is possible that a larger social network may provide more tangible or informational support in finding an affordable place to live, especially in places where affordable housing is scarce. Further, as indicated previously, we know that the presence of a mentor in early adulthood can lead to better outcomes in the educational and employment domains (DuBois & Silverthorn, 2005), and these outcomes could lead to lower dependence on parents in the immediate years following. However, an alternative explanation could be that for some young people a very close mentor is a substitute for a distant or tenuous relationship with parents, which could explain why they would not live with parents, even if they had the need to do so.

There was no relationship between receipt of social support and odds of living in another (non-parental) person's home versus in one's own place. It was hypothesized that living in someone else's home and not in one's own place would be a potential signal of a temporary or unstable living arrangement and that those who had support would be less likely to find themselves in such a situation. However, it is possible that there are varied reasons for living in

someone else's home. The lower power due to smaller numbers of individuals reporting living in someone else's home (N = 4.61%) compared to the other situations (parent's home 12.51%; own place 82.89%) may also have led to lower power and higher risk of Type II error.

Research Question 3: Does social support in the transition to adulthood moderate the relationship between childhood adversity and housing stress and living situation in adulthood?

Housing Stress

As discussed above, those who were emotionally abused in childhood have higher likelihood of experiencing housing stress in adulthood (ages 26 – 32). However, these chances of housing stress differ by receipt of financial assistance from parents at ages 18 – 26, with those receiving \$200 - \$499 having much lower likelihood of housing stress by ages 26 – 32 compared with those who received no money from parents. It is unclear whether it was the actual financial assistance that helped reduce housing stress six years later, or whether receipt of even a smaller amount of financial assistance from a parent in the transition to adulthood is signaling that the young person has a relationship with a parent (perhaps a parent who was not the perpetrator of the emotional abuse), which in itself could be protective for housing stress. The latter hypothesis is more likely, given that receipt of \$200 - \$499 is probably not going to make that much of an impact on overall finances either in the current time point or six years later.

In contrast to the "buffering" role of parental financial support for housing stress among those who experienced mild emotional abuse in childhood, receipt of financial support from parents in the transition to adulthood among those who were not emotionally abused was related to higher odds of housing stress. This differential effect of parental financial support is consistent

with prior research and theory on the stress buffering role of social support, such that support may have a beneficial effect when a stressor is present compared to when it is absent (Aneshenssel, Phelan, & Bierman, 2013). While receipt of a small amount of money may not make much of a difference for those who do not come from a history of emotional abuse, receipt of even a small amount of money may serve as a protection against later housing stress among who were emotionally abused in part because it may be affirming a relationship with a parent. It's possible that those who were emotionally abused view the financial support with greater meaning because they have more uncertain or precarious relationships with family.

That only parental financial support remained as a significant moderator between emotional abuse and housing stress also makes sense in the context of the stress perspective. The type of support one receives is effective to the extent that it relates to the specific need associated with the stressor (Cohen & Willis, 1985). Therefore, because housing stress is primarily associated with economic challenges, it is best addressed through instrumental support.

Living Situation

Living with Parents

We see that among those who experienced emotional abuse 3 or more times, the chances of living with parents compared to living in one's own place increase with receipt of financial assistance from parents at ages 18 - 26. While these young people who were emotionally abused 3 or more times have low likelihood of living with parents when they received no financial support, the likelihood increases substantially with receipt of \$500 - \$999, such that they are much *more* likely to live with parents at ages 26 - 32 than those who were abused 3 or more times but received no financial support. Again, this conditional relationship between high emotional abuse and living with parents in adulthood suggests that receipt of financial support is

indicative of a relationship with a parent in the transition to adulthood, which would explain why they might be more likely to live with a parent or parents. Unfortunately, we do not know if the parent providing financial assistance at ages 18 - 26 is the same parent with whom that the respondent is living at ages 26 - 32, however it is likely that it is the same parent.

Strengths and Limitations

Strengths

This study has several strengths. First, the National Longitudinal Survey of Adolescent to Adult Health (Add Health) is a large-scale population survey of adolescents in 1994 – 1995, which includes an in-home interview sample of 20,745 adolescents in Wave 1. This large sample size provided improved statistical power, particularly in exploring less prevalent experiences of childhood adversity which are difficult to attain in population-based surveys (Straus, Hamby, Finkelhor, Moore & Runyan, 1998). To adjust for stratification and clustered data, sampling weights were developed so that researchers could achieve unbiased estimates of standard errors and population parameters (Chen & Chantala, 2014). Use of the Holm Bonferroni correction for multiple comparisons reduced risk of Type I error (Holm, 1979).

The longitudinal design, including data about individuals' health, social, and economic well-being from adolescence through adulthood allowed for an analysis of the effects of childhood adversity; social support in the transition to adulthood; and housing stress and independent living six years later. Data collected at these different time points also allowed for inclusion of appropriate control variables across adolescence to adulthood. Analyzing social support and housing situation among young adults in the same time point could have led to questions around time-order of housing outcomes and social support. That social support

measures preceded the housing measures in time provides a better understanding of potential influences of social support on housing. Another strength of this study is that the measures of childhood adversity and social support were, with some exceptions, primarily measured on a categorical scale. This provided improved information around the frequency of maltreatment, for example, or the level of closeness to a mentor. This allowed for a more nuanced exploration of effects beyond, for example, a simple "abused/not-abused" binary construct. Ultimately, a detailed population-based understanding of the influence of factors in childhood, the transition to adulthood, and adulthood emerged from these strengths in the study.

Additionally, this study provides a nuanced understanding of the relationship between childhood experiences and housing outcomes beyond literal homelessness. While we have an understanding of the high prevalence of childhood adversity among homeless adults, prior to this study we only understood housing instability as it is experienced by foster youth. This study builds on our understanding of a range of adverse childhood experiences and gives greater attention to the role of childhood emotional abuse in particular on housing stress, which could be a precursor to homelessness. Additionally, while we understand that childhood emotional abuse is associated with a range of challenges in adulthood, this is the first study to link emotional abuse to housing stress and living situation in adulthood. Finally, findings build on prior research on the stress process and stress buffering role of social support, adding a much-needed understanding of how stressors and different types of resources may lead to housing outcomes in particular. Prior to this study, the stress process model had not been used to understand the link between childhood adversity, social support, and adult housing outcomes.

Limitations

This study is not without limitations, particularly around generalizability and construct validity. First, attrition between waves may have meant that analyses were not as representative of the national youth population as they could have been. As indicated in the Methods chapter, those who were lost to attrition between Wave 3 (ages 18 - 26) and Wave 4 (ages 26 – 32) were more likely to be non-White, male, and of younger age compared to those who were not lost to attrition. It is possible that those experiencing more housing stress or living in another (non-parental) person's home could have been harder to locate or had less ability to ability to participate in an interview, compared to those more stably housed, leading to lower generalization of the findings. In addition, those who did not have complete responses on all variables included in the study were dropped from the analytic sample. Individuals who were female had higher likelihood of being dropped due to incomplete responses to key variables than males. Those who reported housing stress at Wave 4, were living in their own place at Wave 4, had high levels of childhood physical or emotional abuse, or having a relationship with a mentor in Wave 3 had lower likelihood of being excluded from the study sample.

Other limitations relate to the measurement of the focal constructs. First, housing stress and living situation were measured in 2008 (Wave 4), which coincided with the recession. We know that the recession affected rates of eviction and doubling up with family or friends (Mykyta & Macartney, 2011). Therefore, prevalence of housing stress may have been much higher and prevalence of independent living may have been much lower among the sample than it would be in earlier or much more recent years. Limitations related to the operationalization of key variables may also be present. This study operationalized the dependent variable "housing stress" as difficulty paying rent/utilities or eviction within the past 12 months. Other indicators of

housing stress, such as frequent moves, overcrowding, unsafe conditions, or high rent-to-income burden, were not measured in Add Health. In addition, the Add Health survey in Wave 4 did not ask respondents the reasons for living in their parents' or in another person's home, which places limitations on interpretation and implications of findings regarding living situation. The operationalization of measures of childhood adversity also has limitations, in that certain details about the experiences that could be important were not included. For example, as indicated above, the single-item measures of presence and frequency of childhood abuse may not have captured the full extent or severity of childhood abuse. We also do not know the age at which individuals were in foster care, including whether or not they exited through emancipation, reunification, or adoption, which could make a difference for housing outcomes in adulthood. Lastly, there is potential recall bias in the responses to questions about childhood adversity, particularly among maltreatment questions asked in Wave 4 (ages 26 – 32). A number of factors, including present circumstances of respondents, can influence recall of earlier events (Prager, 1998), leading to biased over- or under-estimates of childhood abuse (Widom, Raphael, DuMont, 2004; Widom & Shepard, 1996).

It was important that respondent's socioeconomic status was included as a control in the analyses, however there were some limitations to measurement of socioeconomic status in Wave 4 (ages 26 – 32). For example, the unit of analysis for income, assets and debt was the household compared to the individual respondent. Those who are still living with parents would have thus included income, assets and debt of their parents and siblings, which may not represent actual financial resources at their disposal (assets and income) or challenges that they personally must pay off (debt). Parental socioeconomic status was also limited to parental educational attainment

due to the high percentage of missing responses for parental income at Wave 1 (Swallen, Reither, Haas, & Meier, 2005).

Implications for Social Work Practice and Policy

Implications for Practice

Emotional abuse is the most common form of childhood abuse, however it is also the least understood and reported (Barnet, Miller-Perrin, & Perrin, 2005). Given that it is often accompanied by other forms of abuse (Spertus et al., 2003), it can sometimes be overlooked. Further training of those in everyday contact with children such as teachers, nurses, doctors, and coaches may be needed to increase identification of emotional abuse and awareness of the long-term consequences of such maltreatment (Lambie, 2005). It is important that child welfare caseworkers understand the salience of emotional abuse for adult well-being and stability, including housing stress, and pay particular attention to the presence of emotional abuse when investigating other types of abuse or neglect (Trickett, Mennen, Kim, & Sang, 2009). As noted by Trickett and colleagues (2009), a major focus of interventions with new foster parents (if the child is removed from their home of origin) should be on understanding the relevance and consequences of emotional abuse and assistance in supporting the young person. If the maltreating parents retain custody of the child, the parents must be assisted in developing more appropriate parenting methods (Trickett et al., 2009).

Further, this study demonstrated that a mentor in the transition to adulthood may not be protect young people from housing stress six years later, mentors may in fact have an influence on chance of independent living at six years later. This is an important implication for programs and policies that provide formal mentors to transition age youth or help young people connect

with positive adults already in their lives. Given that independent living is the "normative" living situation in the late 20s and early 30s (Furstenberg, 2010), this may point to the potential of mentors to provide tangible support and advice that could lead to better adult stability.

Ultimately, while any work done around improving social support should be done in the context of a comprehensive approach including bolstering access to education, employment, and affordable housing, the role of informal mentors should not be discounted. Increasing the role of existing positive adults in young people's lives is a relatively low-cost intervention that could be expanded. It is possible that mainstream services such as advising and counseling in community colleges or Workforce Investment Boards could provide assistance to every young person in need of creating or deepening a relationship with a non-parental adult in their lives who could serve as an informal mentor.

Finally, this study also demonstrated that the likelihood of housing stress in adulthood (ages 26-32) among those who were emotionally abused in childhood changes at different levels of financial support from a parent in the transition to adulthood (ages 18-26). As mentioned earlier, this suggests that any kind of relationship with a parent in the transition to adulthood, even among those who were emotionally abused by a caregiver, could be protective for housing stress in later years. It may be that young people who were emotionally abused still retain relationships with another parent who was not a perpetrator of the abuse, or mended a relationship with a previously abusive parent. While we need to understand the nuances of this relationship to a much greater extent, this finding is further evidence that any cultivating any kind of supportive relationship with an adult, even a parent, could be a source of resilience for emotionally abused young people as they move through early adulthood.

Implications for Policy

The majority of recent research, policy, and practice interventions related to childhood experiences and young adult housing challenges has been focused on the role of foster care involvement. This important work has provided a significant understanding of the consequences of foster care involvement for later risk of homelessness and housing instability. However, this study suggests the relationship between childhood emotional abuse and housing stress exist above and beyond foster care involvement. The salience of emotional abuse for increased housing stress should receive greater attention in both housing and child welfare sectors. For example, while there are some important housing supports in place for youth aging out or in extended foster care (Dion, Dworsky, Kauff, & Kleinman, 2014), there is currently no special assistance to those who experienced abuse but were not removed from their homes and placed in foster care. If further research continues to demonstrate a direct link between childhood emotional abuse and adult housing stress, practitioners who work with transition age youth may need to address this risk through better identification and intervention with those who are not eligible for existing housing support youchers or programs.

Given that young adults who have experienced emotional abuse are less likely to live with parents, we need to consider alternative options for housing in times of housing stress. One intervention that has been growing among homeless youth providers is the concept of host homes (McTeague, 2015). Through these programs, adults in a community open their homes to a young person in need and provide a safe and stable place for them to live. In the process, they can also provide advice and emotional support that the young person may need. While many host home models focus services for either former foster youth (Dworsky, Dillman, Dion, Coffee-Borden & Rosenau, 2012) or those who are currently homeless (McTeague, 2015), we may want to

consider expanding eligibility to those who have faced significant childhood emotional abuse and are experiencing housing instability.

Directions for Future Research

The findings of this study suggest possible future lines of research. First, a number of questions remain regarding the mechanism through which childhood emotional abuse is related to higher likelihood of adulthood housing stress. In particular, it is important that we understand whether there are psychological mediators (such as self-esteem, self-efficacy, depression) or more proximal mediators such as educational attainment or income that explain the relationship. It would also be important to garner a greater understanding of how combinations of childhood experiences might influence adulthood housing stress. For example, understanding whether having had emotional abuse and then been placed in foster care leads to differential chance of adult housing stress could inform our understanding of whether placement in foster care can protect or worsen risk of adult housing stress.

It would also be important to understand further how social support in the transition to adulthood relates to independent living and housing stress in adulthood. While this study demonstrates that those who receive financial assistance in the transition to adulthood are more likely to live with parents six years later compared to having their own place, this may have been due to higher financial strain among these young people (Fingerman, Miller, Birditt, & Zarit, 2009). Further research could develop a greater understanding of why financial support from parents may not be launching these young people to independent living to the extent that would be expected, and what role living with parents plays in the young person's well-being and future ability to live independently in stable housing.

In addition, future studies should consider improved measures of adult housing outcomes. Housing instability has been defined using a variety of indicators, leading to inability to compare relationships across studies (Frederick et al., 2014). While individual indicators may not alone make up the construct of housing instability, the process in creating an index or latent factor for housing instability may also be challenging. Researchers exploring the precursors to or effects of housing instability need to have this conversation around what defines "housing instability" so that this construct can be more accurately measured.

APPENDIX A

Table 19
Housing Stress in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Closeness to a Mentor in Wave 3 (N = 10,034)

(N = 10,034)	O D	050/ CI
	OR	95% CI
Closeness to a mentor (ref = not close)	4.04	0.00 4.70
Somewhat close	1.24	0.90, 1.72
Quite close	0.91	0.65, 1.26
Very close	0.79	0.56, 1.13
Emotional abuse (ref = none)		
1-2 times	1.05	0.79, 1.39
3 or more times	1.31	0.97, 1.76
Emotional abuse x closeness to a mentor		
1-2 times abused * Somewhat close	1.27	0.70, 2.30
3 or more times * Somewhat close	0.97	0.57, 1.66
1-2 times abused * Quite close	1.54	0.88, 1.66
3 or more times * Quite close	1.49	0.89, 2.68
1-2 times abused * Very close	1.47	0.87, 2.47
3 or more times * Very close	1.39	0.84, 2.29
Control Variables		
Age W4	1.04	0.98, 1.09
Race/ethnicity ^a		
Hispanic	0.96	0.73, 1.28
Black NH	1.34**	1.09, 1.64
Asian NH	0.65	0.42, 1.01
Other NH	1.35	0.81, 2.28
Female ^b	1.05	0.88, 1.24
Parental education ^c		
High school/GED	1.03	0.82, 1.29
Some college	0.98	0.76, 1.27
College graduate	0.90	0.68, 1.19
Some graduate school or more	1.32	0.92, 1.88
Household income W4 d	1.02	0.32, 1.00
\$15,001 - \$30,000	1.07	0.87, 1.32
\$30,001 - \$45,000 \$30,001 - \$45,000	0.82	0.63, 1.07
\$45,001 - \$45,000 \$45,001 - \$150,000	0.62	0.34, 0.67
\$150,001 or more	1.37	0.87, 2.16
Education W4 e	1.57	0.07, 2.10
Voc ed/ some college	0.98	0.92 1.10
College graduate	0.43***	0.82, 1.19 0.33, 0.57
	0.43	•
Completed grad school		0.23, 0.57
Welfare, public assistance or food stamps	1.92***	1.58, 2.33
in W3 or W4		
Household debt W4 f	4 70**	4 40 0 04
\$1,000 to \$4,999	1.76**	1.18, 2.61
\$5,000 to \$9,999	1.95***	1.34, 2.82
\$10,000 to \$24,999	2.21***	1.58, 3.09
\$25,000 to \$49,999	2.20***	1.49, 3.24
\$50,000 to \$99,999	2.70***	1.77, 4.12

Table 19 Housing Stress in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Closeness to a Mentor in Wave 3 (N = 10,034)

(14 = 10,004)	OR	95% CI
\$100,000 or more	2.99***	1.87, 4.78
Household assets W4 g		,
\$5,000 to \$9,999	0.56***	0.43, 0.74
\$10,000 to \$24,999	0.55***	0.43, 0.71
\$25,000 to \$49,999	0.39***	0.28, 0.54
\$50,000 to \$99,999	0.29***	0.23, 0.37
\$100,000 to \$249,000	0.32***	0.22, 0.45
\$250,000 or more	0.09***	0.06, 0.15
Quantity of drinking * Frequency of	1.00	0.99, 1.00
drinking in past 12 months		
Binge drinking past 12 months h		
Once a month or less	1.07	0.85, 1.35
2 or 3 days a month	0.99	0.75, 1.33
Weekly	1.16	0.81, 1.67
Every day	0.71	0.24, 2.06
Marijuana use past 12 months i		
Once a month or less	1.49**	1.16, 1.89
2 or 3 days a month	1.46	0.85, 2.50
Weekly	1.56*	1.09, 2.23
Every day	2.03***	1.50, 2.76
Other drug use past 12 months j	1.14	0.87, 1.48
Depression (CESD score)	1.10***	1.07, 1.33
Cohabiting but not married	1.23	0.95, 1.60
Married	1.02	0.82, 1.26
Number of children	1.23***	1.14, 1.33
Constant	0.04***	0.01, 0.19

^a Reference category: White NH

^b Reference category: Male

c Reference category: Less than high school d Reference category: \$0 - \$15,0000

e Reference category: High school or less

f Reference category: Less than \$1,000

^h Reference category: No binge drinking past 12 months

Reference category: No marijuana use past 12 months

i Reference category: No other drug use past 12 months

Table 20Living Situation in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Closeness to a Mentor in Wave 3 (N = 10,034)

	Living with Parents ^a		Living in Another (Non-Parental) Person's Home ^a	
	RRR	95% CI	RRR	95% CI
Social Support				
Closeness to a mentor ^b				
Somewhat close	0.91	0.61, 1.35	1.16	0.59, 2.27
Quite close	0.98	0.63, 1.53	2.06**	1.29, 3.28
Very close	0.72*	0.52, 0.99	1.16	0.65, 2.07
Emotional abuse ^c				
1-2 times	1.12	0.79, 1.56	1.19	0.65, 2.15
3 or more times	0.62*	0.43, 0.85	1.16	0.68, 1.95
Emotional abuse x closeness to a mentor				
1-2 times abused * Somewhat close	0.45*	0.22, 0.94	0.60	0.18, 1.97
3 or more times * Somewhat close	1.12	0.59, 1.75	0.76	0.26, 2.24
1-2 times abused * Quite Close	0.96	0.53, 1.75	0.44	0.16, 1.18
3 or more times * Quite Close	0.78	0.37, 1.61	0.39*	0.17, 0.90
1-2 times abused * Very Close	1.03	0.56, 1.87	1.78	0.69, 2.19
3 or more times * Very Close	0.84	0.44, 1.59	0.94	0.40, 2.19
Control Variables				
Age W4	0.96	0.89, 1.03	0.99	0.92, 1.08
Race/ethnicity d				
Hispanic	2.30***	1.56, 3.39	0.87	0.56, 1.37
Black NH	1.53**	1.16, 2.03	1.02	0.71, 1.47
Asian NH	2.64***	1.55, 4.50	2.79***	1.71, 4.58
Other NH	1.25	0.62, 2.53	2.39*	1.11, 5.14
Female ^e	0.78	0.62, 0.99	0.82*	0.52, 0.99
Parental education ^f				
High school/GED	0.99	0.72, 1.37	0.71	0.47, 1.05
Some college	0.96	0.67, 1.39	0.68	0.43, 1.08
College graduate	0.77	0.54, 1.09	0.52*	0.29, 0.90
Some graduate school or more	0.43***	0.27, 0.68	0.47*	0.25, 0.89
Household income W4 ^g				
\$15,001 - \$30,000	0.56***	0.44, 0.73	0.55**	0.37, 0.81
\$30,001 - \$45,000	0.31***	0.23, 0.41	0.57**	0.39, 0.83
\$45,001 - \$150,000	0.11***	0.07, 0.16	0.40***	0.27, 0.59
\$150,001 or more	0.45**	0.26, 0.77	0.24**	0.08, 0.68
Education W4 h				
Voc ed/ some college	0.71**	0.57, 0.88	0.53***	0.40, 0.71
College graduate	0.34***	0.25, 0.45	0.57**	0.39, 0.83
Completed grad school	0.18***	0.11, 0.29	0.40***	0.27, 0.59
Welfare, public assistance or food	1.05	0.80, 1.36	0.24**	0.08, 0.68
stamps in W3 or W4				
Household debt W4 i				
\$1,000 to \$4,999	1.44	0.96, 2.14	2.36**	1.26, 4.42
\$5,000 to \$9,999	1.57*	1.09, 2.27	3.42**	1.70, 6.91
\$10,000 to \$24,999	1.49*	1.05, 2.12	1.76	0.98, 3.15
\$25,000 to \$49,999	2.27***	1.63, 3.17	2.80**	1.44, 5.44
\$50,000 to \$99,999	2.43***	1.57, 3.78	2.78**	1.39, 5.57
\$100,000 or more	2.65***	1.77, 3.97	3.92***	1.93, 7.95
•		•		•

Table 20Living Situation in Wave 4 Regressed on the Interaction between Childhood Emotional Abuse and Closeness to a Mentor in Wave 3 (N = 10,034)

Living with Parents Living in Another (Non-Parental) Person's Home RRR 95% Cl RRR 95% Cl RRR 95% Cl St. Quantity Quanti		, ,	,		
Household assets \$5,000 to \$9,999		Living with Parents ^a		(Non-Parental)	
\$5,000 to \$9,999		RRR	95% CI	RRR	95% CI
\$10,000 to \$24,999	Household assets j				
\$10,000 to \$24,999	\$5,000 to \$9,999	1.42	0.93, 2.16	1.03	0.61, 1.74
\$50,000 to \$99,999		1.24	0.83, 1.85	0.98	0.59, 1.64
\$100,000 to \$249,000	\$25,000 to \$49,999	1.94***	1.38, 2.72	1.26	0.79, 2.01
\$250,000 or more 14.78*** 9.29, 23.49 2.82** 1.52, 5.21 Estimated number of drinks in past 12 0.99 0.99, 1.00 0.99 0.99, 1.00 months Binge drinking past 12 months k Once a month or less 0.80 0.63, 1.02 1.03 0.74, 1.44 2 or 3 days a month 0.64* 0.43, 0.97 1.13 0.71, 1.79 Weekly 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months l Once a month or less 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months l Other drug use past	\$50,000 to \$99,999	4.18***	2.64, 6.62	1.26	0.76, 2.07
Estimated number of drinks in past 12 months Binge drinking past 12 months k Once a month or less 2 or 3 days a month Weekly Every day Marijuana use past 12 months l Once a month or less 0.80 0.63, 1.02 1.03 0.74, 1.44 2 or 3 days a month 0.64* 0.43, 0.97 1.13 0.71, 1.79 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months l Once a month or less 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children	\$100,000 to \$249,000	6.39***	4.25, 9.60	2.77***	1.76, 4.34
months Binge drinking past 12 months k Once a month or less 0.80 0.63, 1.02 1.03 0.74, 1.44 2 or 3 days a month 0.64* 0.43, 0.97 1.13 0.71, 1.79 Weekly 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months I 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months II 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	\$250,000 or more	14.78***	9.29, 23.49	2.82**	1.52, 5.21
Binge drinking past 12 months k Once a month or less Once a month or less Once a month or less Once a month Onc	Estimated number of drinks in past 12	0.99	0.99, 1.00	0.99	0.99, 1.00
Once a month or less 0.80 0.63, 1.02 1.03 0.74, 1.44 2 or 3 days a month 0.64* 0.43, 0.97 1.13 0.71, 1.79 Weekly 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months on less 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months on less on	months				
2 or 3 days a month 0.64* 0.43, 0.97 1.13 0.71, 1.79 Weekly 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months I 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months II 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59*** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Binge drinking past 12 months k				
Weekly 0.54** 0.34, 0.85 1.50 0.88, 2.56 Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months I 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months II 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59*** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Once a month or less	0.80	0.63, 1.02	1.03	0.74, 1.44
Every day 1.22 0.41, 3.61 2.27 0.55, 9.40 Marijuana use past 12 months I 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months II 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	2 or 3 days a month	0.64*	0.43, 0.97	1.13	0.71, 1.79
Marijuana use past 12 months I 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Weekly	0.54**	0.34, 0.85	1.50	0.88, 2.56
Once a month or less 0.88 0.63, 1.24 1.18 0.75, 1.86 2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Every day	1.22	0.41, 3.61	2.27	0.55, 9.40
2 or 3 days a month 0.89 0.42, 1.95 0.91 0.37, 2.17 Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Marijuana use past 12 months I				
Weekly 0.89 0.59, 1.34 0.91 0.49, 1.67 Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Once a month or less	0.88	0.63, 1.24	1.18	0.75, 1.86
Every day 1.02 0.67, 1.56 1.08 0.64, 1.86 Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	2 or 3 days a month	0.89	0.42, 1.95	0.91	0.37, 2.17
Other drug use past 12 months m 1.08 0.75, 1.56 1.32 0.89, 1.95 Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Weekly	0.89	0.59, 1.34	0.91	0.49, 1.67
Depression (CESD score) 1.03 0.99, 1.07 1.05 0.99, 1.11 Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Every day	1.02	0.67, 1.56	1.08	0.64, 1.86
Cohabiting but not married 0.06*** 0.04, 0.09 0.59** 0.42, 0.83 Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Other drug use past 12 months m	1.08	0.75, 1.56	1.32	0.89, 1.95
Married 0.05*** 0.03, 0.06 0.16*** 0.09, 0.26 Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Depression (CESD score)	1.03	0.99, 1.07	1.05	0.99, 1.11
Number of children 0.82*** 0.73, 0.91 0.91 0.77, 1.06	Cohabiting but not married	0.06***	0.04, 0.09	0.59**	0.42, 0.83
	Married			0.16***	
Constant 2.12 0.28, 15.67 0.15 0.01, 1.74	Number of children	0.82***	0.73, 0.91	0.91	0.77, 1.06
	Constant	2.12	0.28, 15.67	0.15	0.01, 1.74

^a Reference category: Living in own place

^b Reference category: Less than \$200

^c Reference category: No childhood emotional abuse

d Reference category: White NH

e Reference category: Male

^fReference category: Less than high school

^g Reference category: \$0 - \$15,0000

h Reference category: High school or less

¹ Reference category: Less than \$1,000

Reference category: Less than \$5,000

^k Reference category: No binge drinking past 12 months

Reference category: No marijuana use past 12 months

^m Reference category: No other drug use past 12 months

REFERENCES

- Abdi, H. (2010). Holm's sequential Bonferroni procedure. In N. J. Salkind (Ed.), *Encyclopedia of research design* (574–578). Thousand Oaks, CA: Sage.
- Afifi, T. D., & Nussbaum, J. (2006). Stress and adaptation theories: Families across the life span. *Engaging Theories in Family Communication: Multiple perspectives*, 276-292.
- Ahrens, K. R., DuBois, D. L., Richardson, L. P., Fan, M. Y., & Lozano, P. (2008). Youth in foster care with adult mentors during adolescence have improved adult outcomes. *Pediatrics*, *121*(2), e246-e252.
- Allen, B. (2008). An analysis of the impact of diverse forms of childhood psychological maltreatment on emotional adjustment in early adulthood. *Child Maltreatment*, 13(3), 307-312. doi: 10.1177/1077559508318394
- Ammerman SD, Ensign J, Kirzner R, Meininger ET, Tornabene M, Warf CW, Zerger S, Post P. (2004). *Homeless young adults Ages 18—24: Examining service delivery adaptations*. Nashville, TN: National Health Care for the Homeless Council, Inc.
- Anda, R. F., Felitti, V. J., Bremner, J. D., Walker, J. D., Whitfield, C. H., Perry, B. D., ... & Giles, W. H. (2006). The enduring effects of abuse and related adverse experiences in childhood. *European Archives of Psychiatry and Clinical Neuroscience*, 256(3), 174-186.
- Aneshensel, C. S. (2013). *Theory-based data analysis for the social sciences* (3rd ed.). Los Angeles: Sage.
- Aneshensel, C. S., Phelan, J. C., & Bierman, A. (2013). The sociology of mental health:

 Surveying the field. In *Handbook of the Sociology of Mental Health* (pp. 1-19). Springer Netherlands.

- Aquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and the Family*, 858-870.
- Aquilino, W.S. (2006). Family relationships and support systems in emerging adulthood.

 Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469.
- Arnett, J. J., Ramos, K. D., & Jensen, L. A. (2001). Ideological views in emerging adulthood:

 Balancing autonomy and community. *Journal of Adult Development*, 8(2), 69-79.
- Auerswald, C. L., Sugano, E., Ellen, J. M., & Klausner, J. D. (2006). Street-based STD testing and treatment of homeless youth are feasible, acceptable and effective. *Journal of Adolescent Health*, 38(3), 208-212.
- Avery, R. J., & Freundlich, M. (2009). You're all grown up now: Termination of foster care support at age 18. *Journal of Adolescence*, 32(2), 247-257.
- Avery, R., Goldscheider, F., & Speare, A. (1992). Feathered nest/gilded cage: Parental income and leaving home in the transition to adulthood. *Demography*, 29(3), 375-388.
- Barnett, O., Miller-Perrin, C. L., & Perrin, R. D. (2005). Child psychological maltreatment. *Family violence across the lifespan: An introduction. 2nd ed.* Thousand Oaks, CA: Sage Publications, 151-178.
- Bakos, P. (2007). Multiple barriers, multiple solutions: Inclusion into and through employment for people who are homeless in Europe. National report Hungary annual theme 2007.

 Brussels, Belgium: European Federation of National Organisations Working with the Homeless. Retrieved from
 - http://www.refomix.hu/cikkek/Hungary_empl_report_2007_EN.pdf

- Bassuk, E. L., & Rosenberg, L. (1988). Why does family homelessness occur? A case-control study. *American Journal of Public Health*, 78(7), 783-788.
- Bassuk, E. L., Weinreb, L. F., Buckner, J. C., Browne, A., Salomon, A., & Bassuk, S. S. (1996).

 The characteristics and needs of sheltered homeless and low-income housed mothers. *JAMA*, 276(8), 640-646.
- Bebout, R. R., Drake, R. E., Xie, H., McHugo, G. J., & Harris, M. (1999). Housing status among formerly homeless dually diagnosed adults. *Treatment of Mental Illness and Substance Abuse: A Compendium of Articles from Psychiatric Services*, 50.
- Bebout, R. R., Drake, R. E., Xie, H., McHugo, G. J., & Harris, M. (1997). Housing status among formerly homeless dually diagnosed adults. *Psychiatric Services*, 48(7), 936-941.
- Benjaminsen, L., & Andrade, S. B. (2015). Testing a typology of homelessness across welfare regimes: Shelter use in Denmark and the USA. *Housing Studies*, (ahead-of-print), 1-19.
- Berzin, S. C., Rhodes, A. M., & Curtis, M. A. (2011). Housing experiences of former foster youth: How do they fare in comparison to other youth?. *Children and Youth Services Review*, 33(11), 2119-2126.
- Bleemer, Z., Brown, M., Lee, D., & van der Klaauw, W. (2014). Debt, jobs, or housing: What's keeping millennials at home? New York: Federal Reserve Bank of New York: Retrieved from https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr700.pdf
- Bolton, C. J. (2005). *Helping the homeless: Program evaluation of Philadelphia's supportive housing program* (Doctoral dissertation, Drexel University).
- Bourdieu, P. (1986). The forms of capital. *Cultural theory: An anthology*, 81-93.
- Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence

- and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*, 18(6), 685-696.
- Brakenhoff, B., Jang, B., Slesnick, N., & Snyder, A. (2015). Longitudinal predictors of homelessness: findings from the National Longitudinal Survey of Youth-97. *Journal of Youth Studies*, (ahead-of-print), 1-20.
- Broadbent, R. (2008). The real cost of linking homeless young people to employment, education and training. *Youth Studies Australia*, 27(3), 30.
- Brown, J. G. (2004). Supported housing programs for the homeless mentally ill: A survival analysis (Doctoral dissertation, Drexel University).
- Brownstein, N., Kalsbeek, W.D., Tabor, J., Entzel, P., Daza, E., Harris, K.M. (2010). *Non-response in Wave IV of the National Longitudinal Study of Adolescent Health*. Chapel Hill, NC: Carolina Population Center. Retrieved from http://www.cpc.unc.edu/projects/addhealth/data/guides/W4_nonresponse.pdf
- Burns, B. J., Phillips, S. D., Wagner, H. R., Barth, R. P., Kolko, D. J., Campbell, Y., & Landsverk, J. (2004). Mental health need and access to mental health services by youths involved with child welfare: A national survey. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43(8), 960-970.
- Burt, M. R., & Cohen, B. E. (1989). *America's homeless: Numbers, characteristics, and programs that serve them* (Vol. 89, No. 3). The Urban Insitute.
- Carolina Population Center. (n.d.). *Design facts at a glance*. Chapel Hill, NC: Author. Retrieved from http://www.cpc.unc.edu/projects/addhealth/design/designfacts
- Carolina Population Center. (n.d.). *Questions about data*. Chapel Hill, NC: Author. Retrieved from www.cpc.unc.edu/projects/addhealth/faqs/aboutdata

- Carpiano, R. M. (2006). Toward a neighborhood resource-based theory of social capital for health: Can Bourdieu and sociology help?. *Social Science & Medicine*, 62(1), 165-175.
- Caspi, A., Wright, B. R. E., Moffitt, T. E., & Silva, P. A. (1998). Early failure in the labor market: Childhood and adolescent predictors of unemployment in the transition to adulthood. *American Sociological Review*, 424-451.
- Cassel, J. (1974). Psychosocial processes and "stress": Theoretical formulation. *International Journal of Health Services*, *4*(3), 471-482.
- Caton CLM, Hasin D, Shrout PE, et al. (2000). Risk factors for homelessness among indigent urban adults with no history of psychotic illness. *American Journal of Public Health*.
- Caton, C. L., Hasin, D., Shrout, P. E., Opler, L. A., Hirshfield, S., Dominguez, B., & Felix, A. (2000). Risk factors for homelessness among indigent urban adults with no history of psychotic illness: a case-control study. *American Journal of Public Health*, 90(2), 258.
- Center for Public Policy Priorities (2001). All grown up, nowhere to go: Teens in foster care transition. Retrieved May 9, 2015, from: http://www.cppp.org/files/4/all %20grown%20up.pdf
- Chantala, K., Kalsbeek, W. & Andraca, E. (2005). Non-response in Wave III of the Add Health Study. Chapel Hill, NC: Carolina Population Center. Retrieved from http://www.cpc.unc.edu/projects/addhealth/data/guides/W3nonres.pdf
- Charuvastra, A., & Cloitre, M. (2008). Social bonds and posttraumatic stress disorder. *Annual Review of Psychology*, 59, 301.
- Chen, P. & Chantala, K. (2014). Guidelines for analyzing Add Health data. Chapel Hill, NC:

 Carolina Population Center. Retrieved from

 http://www.cpc.unc.edu/projects/addhealth/data/guides/wt-guidelines.pdf

- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*(5), 300-314.
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, *13*(2), 99.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, S95-S120.
- Collins, M. E., Spencer, R., & Ward, R. (2010). Supporting youth in the transition from foster care: Formal and informal connections. *Child Welfare*, 89(1), 125.
- Coulton, C., Theodos, B., & Turner, M. A. (2009). Family Mobility and Neighborhood Change:

 New Evidence and Implications for Community Initiatives. Washington, D.C.: *Urban Institute*.
- Courtney, M., Dworsky, A., Brown, A., Cary, C., Love, K., & Vorhies, V. (2011). Midwest evaluation of the adult functioning of former foster youth: Outcomes at age 26. Chicago, IL: Chapin Hall at the University of Chicago. Retrieved from https://www.chapinhall.org/sites/default/files/Midwest%20Evaluation_Report_4_10_12.p df
- Courtney, M., Dworsky, A., Lee, J., & Rapp, M. (2010). *Midwest evaluation of the adult*functioning of former foster youth: Outcomes at age 23 and 24. Chicago, IL: Chapin Hall at the University of Chicago. Retrieved from

 https://www.chapinhall.org/sites/default/files/Midwest_Study_ES_Age_23_24.pdf

- Culhane, D. P., & Metraux, S. (2008). Rearranging the deck chairs or reallocating the lifeboats?

 Homelessness assistance and its alternatives. *Journal of the American Planning*Association, 74(1), 111-121.
- Culhane, D.P., Metraux, S., Park, J.M., Schretzman, M., and Valente, J. (2007). Testing a typology of family homelessness based on patterns of public shelter utilization in four U.S. jurisdictions: Implications for policy and program planning. *Housing Policy Debate*, 18 (1), 1–28.
- Cunningham, M. J., & Diversi, M. (2013). Aging out: Youths' perspectives on foster care and the transition to independence. *Qualitative Social Work*, *12*(5), 587-602.
- Curry, S. R., & Abrams, L. S. (2014). Housing and social support for youth aging out of foster care: State of the research literature and directions for future inquiry. *Child and Adolescent Social Work Journal*, 32(2), 143-153.
- Dickson-Gomez, J., Convey, M., Hilario, H., & Corbett, A. M. (2008). Structural and personal factors related to access to housing and housing stability among urban drug users in Hartford, Connecticut. *Contemp. Drug Probs.*, *35*, 115.
- Drake, R. E., Wallach, M. A., & Hoffman, J. S. (1989). Housing instability and homelessness among aftercare patients of an urban state hospital. *Psychiatric Services*, 40(1), 46-51.
- Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003).
 Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the
 adverse childhood experiences study. *Pediatrics*, 111(3), 564-572.
- DuBois, D. L., & Silverthorn, N. (2005). Natural mentoring relationships and adolescent health: Evidence from a national study. *American Journal of Public Health*, 95(3), 518-524.

- Dworsky, A., Napolitano, L., & Courtney, M. (2013). Homelessness during the transition from foster care to adulthood. *American Journal of Public Health*, 103(S2), S318-S323.
- Dworsky, A., Dillman, K. N., Dion, R. M., Coffee-Borden, B., & Rosenau, M. (2012). Housing for youth aging out of foster care: A review of the literature and program typology. Washington, D.C.: *US Department of Housing and Urban Development Office of Policy Development & Research*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2112278
- Estroff, S. E., Zimmer, C., Lachicotte, W. S., & Benoit, J. (1994). The influence of social networks and social support on violence by persons with serious mental illness. *Psychiatric Services*, *45*(7), 669-679.
- Eyrich, K. M., Pollio, D. E., & North, C. S. (2003). An exploration of alienation and replacement theories of social support in homelessness. *Social Work Research*, 27(4), 222-231.
- Fagan, J. F., & Freeman, R. B. (1999). Crime and work. In M. Tonry (Ed.), *Crime and justice: A review of research* (pp. 225-290). Chicago: University of Chicago Press
- Ferguson, K. M., Bender, K., Thompson, S. J., Maccio, E. M., & Pollio, D. (2011). Employment status and income generation among homeless young adults: results from a five-city, mixed-methods study. *Youth & Society*, 0044118X11402851.
- Fertig, A. R., & Reingold, D. A. (2008). Homelessness among At-Risk Families with Children in Twenty American Cities. *Social Service Review*, 82(3), 485-510.
- Fingerman, K. L., Cheng, Y. P., Tighe, L., Birditt, K. S., & Zarit, S. (2012). Relationships between young adults and their parents. In A. Booth, S.L. Brown, N.S. Landale, W.D. Manning, & S.M. McHale (Eds.), *Early adulthood in a family context* (pp. 59-85). New York: Springer.

- Fingerman, K. L., Cheng, Y. P., Wesselmann, E. D., Zarit, S., Furstenberg, F., & Birditt, K. S. (2012). Helicopter parents and landing pad kids: Intense parental support of grown children. *Journal of Marriage and Family*, 74(4), 880-896.
- Fingerman, K., Miller, L., Birditt, K., & Zarit, S. (2009). Giving to the good and the needy:

 Parental support of grown children. *Journal of Marriage and Family*, 71(5), 1220-1233.
- Fothergill, K. E., Doherty, E. E., Robertson, J. A., & Ensminger, M. E. (2012). A prospective study of childhood and adolescent antecedents of homelessness among a community population of African Americans. *Journal of Urban Health*, 89(3), 432-446.
- Fowler, P. J., Toro, P. A., & Miles, B. W. (2009). Pathways to and from homelessness and associated psychosocial outcomes among adolescents leaving the foster care system. *American Journal of Public Health*, 99(8), 1453.
- Frederick, T. J., Chwalek, M., Hughes, J., Karabanow, J., & Kidd, S. (2014). How stable is stable? Defining and measuring housing stability. *Journal of Community*Psychology, 42(8), 964-979.
- Frederick, T. J., Chwalek, M., Hughes, J., Karabanow, J., & Kidd, S. (2014). How stable is stable? Defining and measuring housing stability. *Journal of Community*Psychology, 42(8), 964-979.
- Freeman, R. (1992). Crime and economic status of disadvantaged young men. In G. Peterson & W. Vroman (Eds.), Urban labor markets and job opportunities (pp. 112-152).

 Washington, DC: Urban Institute Press.
- Furstenberg Jr, F. F. (2010). On a new schedule: Transitions to adulthood and family change. *The Future of Children*, 20(1), 67-87.

- Furstenberg Jr, F. F., & Hughes, M. E. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family*, 580-592.
- Furstenberg, F. F. (2005). Banking on families: How families generate and distribute social capital. *Journal of Marriage and Family*, 67(4), 809-821.
- Furstenberg, F. F., Rumbaut, R. G., & Settersten, R. A. (2005). On the frontier of adulthood:

 Emerging themes and new directions. In R.A. Settersten, F.F. Furstenberg, & R.G.

 Rumbaut, (Eds.), *On the frontier of adulthood: Theory, Research, and Public Policy* (3-25). Chicago, IL: University of Chicago Press.
- Garrett, S. B., Higa, D. H., Phares, M. M., Peterson, P. L., Wells, E. A., & Baer, J. S. (2008).

 Homeless youths' perceptions of services and transitions to stable housing. *Evaluation and Program Planning*, 31(4), 436-444.
- Geller A., & Curtis, M.A. 2011. A sort of homecoming: Incarceration and the housing security of urban men. *Social Science Research*, 40, 1196-1213. Retrieved from http://www.sciencedirect.com/science/article/pii/S0049089X11000585
- Gibson, R. L., & Hartshorne, T. S. (1996). Childhood sexual abuse and adult loneliness and network orientation. *Child Abuse & Neglect*, 20(11), 1087-1093.
- Goldscheider, F., & Goldscheider, C. (1993). Whose nest? A two-generational view of leaving home during the 1980s. *Journal of Marriage and the Family*, 851-862.
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, *373*(9657), 68-81.
- Goldscheider, F., & Goldscheider, C. (1993). Whose nest? A two-generational view of leaving home during the 1980s. *Journal of Marriage and the Family*, 851-862.

- Goodman, L. A. (1991). The prevalence of abuse among homeless and housed poor mothers: A comparison study. *American Journal of Orthopsychiatry*, 61(4), 489.
- Goodman, E. (1999). The role of socioeconomic status gradients in explaining differences in US adolescents' health. *American Journal of Public Health*, 89(10), 1522-1528.
- Gringeri, C., & Vogel-Ferguson, M. B. (2013). Childhood abuse and loss in the lives of low-income women. *Qualitative Social Work*, *12*(5), 654-670.
 - Haber, M. G., & Toro, P. A. (2004). Homelessness among families, children, and adolescents: An ecological–developmental perspective. *Clinical Child and Family Psychology Review*, 7(3), 123-164.
- Hagan, J., & McCarthy, B. (2005). Homeless youth and the perilous passage to adulthood. In
 D.W. Osgood, E.M. Foster, C. Flanagan, & G.R. Ruth (Eds.), *On your own without a net:*The transition to adulthood for vulnerable populations, 178-201. Chicago: University of Chicago Press.
- Harris, K.M. (2013). The Add Health Study: Design and accomplishments. Chapel Hill, NC: Carolina Population Center. Retrieved from http://www.cpc.unc.edu/projects/addhealth/data/guides/DesignPaperWIIV.pdf
- Harris, K.M., C.T. Halpern, E. Whitsel, J. Hussey, J. Tabor, P. Entzel, and J.R. Udry. (2009).

 The National Longitudinal Study of Adolescent to Adult Health: Research Design

 [WWW document]. Retrieved from http://www.cpc.unc.edu/projects/addhealth/design.
- Heller, K. & Rook, K.S. (1997). Distinguishing the theoretical functions of social ties:

 Implications for support interventions. In S. Duck, (Ed), *Handbook of personal*relationships: Theory, research and interventions (2nd ed.).(649-670). Hoboken, NJ, US:

 John Wiley & Sons Inc.

- Herman, D. B., Susser, E. S., Struening, E. L., & Link, B. L. (1997). Adverse childhood experiences: are they risk factors for adult homelessness? *American Journal of Public Health*, 87(2), 249-255.
- Herrenkohl, R.C. (1990) Research directions related to child abuse and neglect. In: *Children at Risk: An Evaluation of Factors Contributing to Child Abuse and Neglect* (Eds R.T. Ammerman & M. Hersen), pp. 85–108. Plenum Press, New York.
- Hill, T. D., Kaplan, L. M., French, M. T., & Johnson, R. J. (2010). Victimization in Early Life and Mental Health in Adulthood An Examination of the Mediating and Moderating
 Influences of Psychosocial Resources. *Journal of Health and Social Behavior*, 51(1), 48-63.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513.
- Hook, J. L., & Courtney, M. E. (2011). Employment outcomes of former foster youth as young adults: The importance of human, personal, and social capital. *Children and Youth Services Review*, *33*(10), 1855-1865.
- Huang, S., Trapido, E., Fleming, L., Arheart, K., Crandall, L., French, M., ... & Prado, G. (2011).

 The long-term effects of childhood maltreatment experiences on subsequent illicit drug use and drug-related problems in young adulthood. *Addictive behaviors*, 36(1), 95-102.
- Iglehart, A. P. (1995). Readiness for independence: Comparison of foster care, kinship care, and non-foster care adolescents. *Children and Youth Services Review*, 17(3), 417-432.
- Ioannides, Y. M., & Loury, L. D. (2004). Job information networks, neighborhood effects, and inequality. *Journal of Economic Literature*, 42(4), 1056-1093.

- Jackson, L. E. (2003). The relationship of urban design to human health and condition. *Landscape and Urban Planning*, 64, 191–200.
- James, S., Landsverk, J., & Slymen, D. J. (2004). Placement movement in out-of-home care: Patterns and predictors. *Children and Youth Services Review*, 26(2), 185-206.
- Johnson, M. (2013). Parental financial assistance and young adults' relationships with parents and well-being. *Journal of Marriage and Family*, 75(3), 713-733.
- Joint Center for Housing Studies of Harvard University (2015). *The state of the nation's housing* 2015. Cambridge, MA: Author. Retrieved from http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs-sonhr-2015-full.pdf
- Kaniasty, K., & Norris, F. H. (1997). Social support dynamics in adjustment to disasters. In S. Duck (Ed.), *Handbook of personal relationships*, 595-619. Los Angeles: Sage Publications.
- Kaplan, G. (2012). Moving back home: Insurance against labor market risk. *Journal of Political Economy*, 120(3), 446-512.
- Kidd, S., & Scrimente, K. (2004, August). Evaluating child and youth homelessness.
- Kipke, M. D., Montgomery, S., & MacKenzie, R. G. (1993). Substance use among youth seen at a community-based health clinic. *Journal of Adolescent Health*, *14*(4), 289-294.
- Koegel, P., Melamid, E., & Burnam, M. A. (1995). Childhood risk factors for homelessness among homeless adults. *American Journal of Public Health*, 85(12), 1642-1649.
- Kreindler, S. A., & Coodin, S. (2010). Housing histories of assertive community treatment clients: program impacts and factors associated with residential stability. *Canadian Journal of Psychiatry*, 55(3), 150.

- Lam, J. A., & Rosenheck, R. (1999). Social support and service use among homeless persons with serious mental illness. *International Journal of Social Psychiatry*, 45(1), 13-28.
- Lambie, G. W. (2005). Child abuse and neglect: A practical guide for professional school counselors. *Professional School Counseling*, 249-258.
- Lamoureux, B. E., Palmieri, P. A., Jackson, A. P., & Hobfoll, S. E. (2012). Child sexual abuse and adulthood-interpersonal outcomes: Examining pathways for intervention. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(6), 605.
- Langford, C. P. H., Bowsher, J., Maloney, J. P., & Lillis, P. P. (1997). Social support: a conceptual analysis. *Journal of Advanced Nursing*, 25(1), 95-100.
- Lee, B. A., Tyler, K. A., & Wright, J. D. (2010). The new homelessness revisited. *Annual Review of Sociology*, *36*, 501.
- Letiecq, B. L., Anderson, E. A., & Koblinsky, S. A. (1998). Social support of homeless and housed mothers: A comparison of temporary and permanent housing arrangements. *Family Relations*, 415-421.
- Lin, N., Cook, K. S., & Burt, R. S. (Eds.). (2001). *Social capital: Theory and research*.

 Transaction Publishers.
- Lippert, A. M., & Lee, B. A. (2015). Stress, Coping, and Mental Health Differences among Homeless People. *Sociological Inquiry*.
- Luecken, L. J., & Gress, J. L. (2010). Early adversity and resilience in emerging adulthood. *Handbook of adult resilience*, 238-257.
- Lueken, L., & Lemery, K. (2004). Early caregiving and physiological stress response. *Clinical Psychology Review*, 24(2), 171-191.

- M.G. Runtz, J.R. Shallow. (1997). Social support and coping strategies as mediators of adult adjustment following childhood maltreatment. *Child Abuse & Neglect*, 21, 211–226.
- Macomber, J. E., Cuccaro-Alamin, S., Duncan, D., Kuehn, D., McDaniel, M., Vericker, T.,

 Pergamit, M., Needel, B., Kum, H.C., Stewart, J., Lee, C.K., & Barth, R.B. (2008).

 Coming of age: Employment outcomes for youth who age out of foster care through their middle twenties. Washington, D.C.: Urban Institute. Retrieved from http://www.urban.org/research/publication/coming-age-employment-outcomes-youth-who-age-out-foster-care-through-their-middle-twenties
- Martinez, D. J., & Abrams, L. S. (2013). Informal social support among returning young offenders A metasynthesis of the literature. *International Journal of Offender Therapy and Comparative Criminology*, 57(2), 169-190.
- McChesney, K. Y. (1990). Family homelessness: A systemic problem. *Journal of Social Issues*, 46(4), 191-205.
- McKenzie, K., Whitley, R., & Weich, S. (2002). Social capital and mental health. *The British Journal of Psychiatry*, 181(4), 280-283.
- McLewin, L. A., & Muller, R. T. (2006). Attachment and social support in the prediction of psychopathology among young adults with and without a history of physical maltreatment. *Child Abuse & Neglect*, *30*(2), 171-191.
- McTeague, M. (2015). The host home program model for LGBTQ youth experiencing homelessness: A program evaluation. *Master of Social Work Clinical Research Papers*.

 Paper 495. Retrieved from http://sophia.stkate.edu/msw_papers/495
- Meadows-Oliver, M. (2005). Social support among homeless and housed mothers: an integrative review. *Journal of Psychosocial Nursing and Mental Health Services*, 43(2), 40-47.

- Mendez, P., Hiebert, D., & Wyly, E. (2006). Landing at home: Insights on immigration and metropolitan housing markets from the longitudinal survey of immigrants to Canada. *Canadian Journal of Urban Research*, *15*(2), 82-104.
- Milburn, N., & D'Ercole, A. (1991). Homeless women: Moving toward a comprehensive model. *American Psychologist*, 46(11), 1161.
- Monat, A., & Lazarus, R. S. (1991). *Stress and coping: An anthology*. New York: Columbia University Press.
- Myers, D.; Wolch, JR. The polarization of housing status.. In: Farley, R., editor. State of the Union: America in the 1990s. Vol 1:Economic Trends. Vol. 6. Russell Sage; New York: 1995. p. 269-334.
- Mykyta, L., & Macartney, S. (2011). The effects of recession on household composition:

 "Doubling up" and economic well-being. *US Census Bureau. Social, Economic and Household Statistics Division Working Paper*, 4. Retrieved from http://www.norwescap.org/pdf_public/recession-effects.pdf
- National Alliance to End Homelessness [NAEH]. (2015). The state of homelessness in America.

 Washington, D.C.: Author. Retrieved from

 http://www.endhomelessness.org/library/entry/the-state-of-homelessness-in-america2015
- Nemiroff, R., Aubry, T., & Klodawsky, F. (2010). Factors contributing to becoming housed for women who have experienced homelessness. *Canadian Journal of Urban Research*, 19(2), 23.
- Newman, K. S. (2012). The accordion family: Boomerang kids, anxious parents, and the private toll of global competition. Beacon Press.

- North, C. S., Eyrich-Garg, K. M., Pollio, D. E., & Thirthalli, J. (2010). A prospective study of substance use and housing stability in a homeless population. *Social psychiatry and psychiatric epidemiology*, 45(11), 1055-1062.
- Orellana, E.R. (2009). Childhood sexual abuse, sex trading, and HIV risks among men in Methadone treatment: The mediating effects of early sexual and substance use initiation, mental health, and adult substance use factors. Unpublished dissertation. UMI 3373540
- Park, J. M., Metraux, S., & Culhane, D. P. (2005). Childhood out-of-home placement and dynamics of public shelter utilization among young homeless adults. *Children and Youth Services Review*, 27(5), 533-546.
- Park, J. M., Metraux, S., Brodbar, G., & Culhane, D. (2004). Child welfare involvement among children in homeless families. *Child Welfare*, 83(5), 423 436.
- Pavao, J., Alvarez, J., Baumrind, N., Induni, M., & Kimerling, R. (2007). Intimate partner violence and housing instability. *American Journal of Preventive Medicine*, 32(2), 143-146.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 2-21.
- Pearlin, L. I., Aneshensel, C. S., & LeBlanc, A. J. (1997). The forms and mechanisms of stress proliferation: The case of AIDS caregivers. *Journal of Health and Social Behavior*, 223-236.
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, 337-356.
- Pearlin, L. I., Mullan, J. T., Semple, S. J., & Skaff, M. M. (1990). Caregiving and the stress process: An overview of concepts and their measures. *The Gerontologist*, 30(5), 583-594.

- Pearlin, L. I., Nguyen, K. B., Schieman, S., & Milkie, M. A. (2007). The life-course origins of mastery among older people. *Journal of Health and Social Behavior*, 48(2), 164-179.
- Pepin, E. N., & Banyard, V. L. (2006). Social support: A mediator between child maltreatment and developmental outcomes. *Journal of Youth and Adolescence*, *35*(4), 612-625.
- Perez, B. F., & Romo, H. D. (2011). "Couch surfing" of Latino foster care alumni: Reliance on peers as social capital. *Journal of Adolescence*, *34*(2), 239-248.
- Perreira, K. M., Deeb-Sossa, N., Harris, K. M., & Bollen, K. (2005). What are we measuring?

 An evaluation of the CES-D across race/ethnicity and immigrant generation. *Social Forces*, 83(4), 1567-1601.
- Portes, A. (2000). Social capital: Its origins and applications in modern sociology. *LESSER*, *Eric L. Knowledge and Social Capital. Boston: Butterworth-Heinemann*, 43-67.
- Powers, A., Ressler, K. J., & Bradley, R. G. (2009). The protective role of friendship on the effects of childhood abuse and depression. *Depression and Anxiety*, 26(1), 46-53.
- Prante, M. F. (2013). Longitudinal analysis of resource competitiveness and homelessness among young adults. (Unpublished master's thesis). Utah State University, Logan, Utah.
- Propp, J., Ortega, D., & NewHeart, F. (2003). Independence or interdependence: Rethinking the transition from ward of the court to adulthood. *Families in Society*, 84(2), 259-266.
- Pruegger, V. J., & Tanasescu, A. (2007). *Housing issues of immigrants and refugees in Calgary*. Calgary, Canada: The Poverty Reduction Coalition, and the United Way of Calgary and Area. Retrieved from http://www.homelesshub.ca/ResourceFiles/r5qrpj1a.pdf
- Putnam, R. D. (1993). The prosperous community: social capital and public life. *The American Prospect*, 13.

- Putnam, R.D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Rhodes, J. E., Ebert, L., & Fischer, K. (1992). Natural mentors: An overlooked resource in the social networks of young, African American mothers. *American Journal of Community Psychology*, 20(4), 445-461.
- Roos, L. E., Mota, N., Afifi, T. O., Katz, L. Y., Distasio, J., & Sareen, J. (2013). Relationship between adverse childhood experiences and homelessness and the impact of axis I and II disorders. *American Journal of Public Health*, 103(S2), S275-S281.
- Saegert, S., & Evans, G. W. (2003). Poverty, housing niches, and health in the United States. *Journal of Social Issues*, *59*(3), 569-589.
- Salazar, A. M. (2011). Investigating the predictors of postsecondary education success and postcollege life circumstances of foster care alumni. Unpublished doctoral dissertation, Portland State University, Portland, OR.
- Samuels, G. M., & Pryce, J. M. (2008). "What doesn't kill you makes you stronger": Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review*, 30(10), 1198-1210.
- Sansone, F. A. (1998). Social support's contribution to reduced welfare dependency: Program outcomes of long term welfare recipients. *J. Soc. & Soc. Welfare*, 25, 105.
- Schoeni, R. F., & Ross, K. E. (2005). *Material assistance from families during the transition to adulthood*. University of Chicago Press.
- Schumm, J. A., Briggs-Phillips, M., & Hobfoll, S. E. (2006). Cumulative interpersonal traumas and social support as risk and resiliency factors in predicting PTSD and depression among inner-city women. *Journal of Traumatic Stress*, *19*(6), 825-836.

- Shelton, K. H., Taylor, P. J., Bonner, A., & van den Bree, M. (2009). Risk factors for homelessness: evidence from a population-based study. *Psychiatric Services*, 60(4), 465-472.
- Shin, H., & Poertner, J. (2002). The well-being of older youth in out-of-home care who are headed to independence. *Children and Family Research Center: University of Illinois, School of Social Work, Urbana, Illinois.*
- Shinn, M. (1992). Homelessness: What is a psychologist to do?. *American Journal of Community Psychology*, 20(1), 1-24.
- Shinn, M. (2007). International Homelessness: Policy, Socio-Cultural, and Individual Perspectives. *Journal of Social Issues*, 63(3), 657-677.
- Shinn, M., Knickman, J. R., & Weitzman, B. C. (1991). Social relationships and vulnerability to becoming homeless among poor families. *American Psychologist*, 46(11), 1180.
- Singer, E. R., Berzin, S. C., & Hokanson, K. (2013). Voices of former foster youth: Supportive relationships in the transition to adulthood. *Children and Youth Services Review*, *35*(12), 2110-2117.
- Slesnick, N., Prestopnik, J. L., Meyers, R. J., & Glassman, M. (2007). Treatment outcome for street-living, homeless youth. *Addictive Behaviors*, 32(6), 1237-1251.
- Song, L., & Lin, N. (2009). Social capital and health inequality: evidence from Taiwan. *Journal* of Health and Social Behavior, 50(2), 149-163.
- Sperry, D. M., & Widom, C. S. (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. *Child Abuse & Neglect*, 37(6), 415-425.

- Spertus, I. L., Yehuda, R., Wong, C. M., Halligan, S., & Seremetis, S. V. (2003). Childhood emotional abuse and neglect as predictors of psychological and physical symptoms in women presenting to a primary care practice. *Child Abuse & Neglect*, 27(11), 1247-1258.
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249-270.
- Sundin, E. C., & Baguley, T. (2014). Prevalence of childhood abuse among people who are homeless in Western countries: a systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, 50(2), 183-194.
- Susser, E., Moore, R., & Link, B. (1993). Risk factors for homelessness. *Epidemiologic Reviews*, 15(2), 546-556.
- Swallen, K. C., Reither, E. N., Haas, S. A., & Meier, A. M. (2005). Overweight, obesity, and health-related quality of life among adolescents: the National Longitudinal Study of Adolescent Health. *Pediatrics*, 115(2), 340-347.
- Tanasescu, A., & Smart, A. (2010). Limits of Social Capital: An Examination of Immigrants' Housing Challenges in Calgary, The. *J. Soc. & Soc. Welfare*, *37*, 97.
- Thompson, M. S., & Cooper, C. L. (2001). Commentaries-A Rose By Any Other Name...: A

 Commentary on Hobfoll's Conservation of Resources Theory. *Applied Psychology-an International Review*, 50(3), 408-418.
- Tompsett, C. J., & Toro, P. A. (2010). Predicting overt and covert antisocial behaviors: parents, peers, and homelessness. *Journal of Community Psychology*, *38*(4), 469-485.

- Toro, P. A. (2007). Toward an international understanding of homelessness. *Journal of Social Issues*, 63(3), 461-481.
- Tourangeau, R. & Shin, H.C (1999). National study of adolescent to adult health: Grand sample weights. Chapel Hill, NC: Carolina Population Center at the University of North Carolina at Chapel Hill. Retrieved from http://www.cpc.unc.edu/projects/addhealth/data/guides/weights.pdf
- Trickett, P. K., Mennen, F. E., Kim, K., & Sang, J. (2009). Emotional abuse in a sample of multiply maltreated, urban young adolescents: Issues of definition and identification. *Child Abuse & Neglect*, *33*(1), 27-35.
- Tsemberis, S., McHugo, G., Williams, V., Hanrahan, P., & Stefancic, A. (2007). Measuring homelessness and residential stability: The residential time-line follow-back inventory. *Journal of Community Psychology*, *35*(1), 29-42.
- Turner, R. J., & Brown, R. L. (2010). Social support and mental health. *A handbook for the study of mental health: Social contexts, theories, and systems*, 200-212.
- Turner, R. J., & Brown, R. L. (2010). Social support and mental health. *A handbook for the study of mental health: Social contexts, theories, and systems*, 200-212.
- Tyler, K. A., Hoyt, D. R., & Whitbeck, L. B. (2000). The effects of early sexual abuse on later sexual victimization among female homeless and runaway adolescents. *Journal of Interpersonal Violence*, 15(3), 235-250.
- Tyler, K. A., Hoyt, D. R., & Whitbeck, L. B. (2000). The effects of early sexual abuse on later sexual victimization among female homeless and runaway adolescents. *Journal of Interpersonal Violence*, 15(3), 235-250.

- U.S. Department of Housing and Urban Development (HUD) (2013). Worst case housing needs 2011: Report to Congress. Washington, D.C.: Author. Retrieved from http://www.huduser.gov/Publications/pdf/HUD-506_WorstCase2011_reportv3.pdf
- U.S. Department of Housing and Urban Development (HUD). 2013. *Homelessness in the United States:* The 2013 annual homeless assessment report to Congress. Washington, D.C.:

 Author. Retrieved from https://www.hudexchange.info/resources/documents/ahar-2013-part1.pdf
- U.S Department of Housing and Urban Development (HUD). 2015. Worst case housing needs:

 2015 report to Congress. Washington, D.C.: Author. Retrieved from

 http://www.huduser.gov/portal/publications/affhsg/wc_HsgNeeds15.html
- Unger, J. B., Kipke, M. D., Simon, T. R., Montgomery, S. B., & Johnson, C. J. (1997). Homeless youths and young adults in Los Angeles: Prevalence of mental health problems and the relationship between mental health and substance abuse disorders. *American Journal of Community Psychology*, 25(3), 371-394.
- van den Bree, M. B., Shelton, K., Bonner, A., Moss, S., Thomas, H., & Taylor, P. J. (2009). A longitudinal population-based study of factors in adolescence predicting homelessness in young adulthood. *Journal of Adolescent Health*, 45(6), 571-578.
- Vaughn, M. G., Ollie, M. T., McMillen, J. C., Scott, L., & Munson, M. (2007). Substance use and abuse among older youth in foster care. *Addictive Behaviors*, 32(9), 1929–1935.
- Vranceanu, A. M., Hobfoll, S. E., & Johnson, R. J. (2007). Child multi-type maltreatment and associated depression and PTSD symptoms: The role of social support and stress. *Child Abuse & Neglect*, 31(1), 71-84.

- Vyncke, V., De Clercq, B., Stevens, V., Costongs, C., Barbareschi, G., Jónsson, S. H., ... & Maes, L. (2013). Does neighbourhood social capital aid in leveling the social gradient in the health and well-being of children and adolescents? A literature review. *BMC Public Health*, 13(1), 65.
- Widom, C. S., Raphael, K. G., & DuMont, K. A. (2004). The case for prospective longitudinal studies in child maltreatment research: Commentary on Dube, Williamson, Thompson, Felitti, and Anda (2004). *Child Abuse & Neglect*, 28(7), 715-722.
- Widom, C. S., & Shepard, R. L. (1996). Accuracy of adult recollections of childhood victimization: Part 1. Childhood physical abuse. *Psychological Assessment*, 8(4), 412.
- Weiser, S. D., Neilands, T. B., Comfort, M. L., Dilworth, S. E., Cohen, J., Tulsky, J. P., & Riley,
 E. D. (2009). Gender-specific correlates of incarceration among marginally housed
 individuals in San Francisco. *American Journal of Public Health*, 99(8), 1459.
- Wenzel, S., Holloway, I., Golinelli, D., Ewing, B., Bowman, R., & Tucker, J. (2012). Social networks of homeless youth in emerging adulthood. *Journal of Youth and Adolescence*, 41(5), 561-571.
- Wheaton, B., Young, M., Montazer, S., & Stuart-Lahman, K. (2013). Social stress in the twenty-first century. In *Handbook of the Sociology of Mental Health*(pp. 299-323). Springer Netherlands.
- Whitbeck, L. B., Hoyt, D. R., Yoder, K. A., Cauce, A. M., & Paradise, M. (2001). Deviant behavior and victimization among homeless and runaway adolescents. *Journal of Interpersonal Violence*, 16(11), 1175-1204.
- Wright, B. R. E. (1998). Behavioral intentions and opportunities among homeless individuals: A reinterpretation of the theory of reasoned action. *Social Psychology Quarterly*, 271-286.

- Wood, D. L., Valdez, R. B., Hayashi, T., & Shen, A. (1990). Health of homeless children and housed, poor children. *Pediatrics*, 86(6), 858-866.
- Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27(2), 151-208.
- Young, S.Jaggers, J. & Pollio, D. E. (2014). Homelessness and juvenile justice (2nd Ed.). In W. Church, D.W. Springer & A.W. Roberts (Eds.), *Juvenile Justice Sourcebook* (464-485).

 New York, NY: Oxford University Press.
- Zlotnick, C., Robertson, M. J., & Wright, M. A. (1999). The impact of childhood foster care and other out-of-home placement on homeless women and their children. *Child Abuse & Neglect*, 23(11), 1057-1068.