

©Copyright 2014  
Eric Ngugi Waithaka

Applying Bourdieu's Conceptualization of Family Capital to our Understanding of Young  
Adults life outcomes: Educational Achievement and Economic Well-being

Eric Ngugi Waithaka

A dissertation

submitted in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy

University of Washington

2014

Reading Committee:

Gunnar Almgren, Chair

Diane Morrison

Tracy Harachi

Stewart Tolnay

Program Authorized to Offer Degree:

School of Social Work

University of Washington

**Abstract**

Applying Bourdieu's Conceptualization of Family Capital to our Understanding of Young Adults life outcomes: Educational Achievement and Economic Well-being

Eric Ngugi Waithaka

Chair of the Supervisory Committee:  
Associate Professor Gunnar Almgren  
School of Social Work

The achievement of the traditional milestones associated with adulthood within the current cohort of young adults appears to differ by social class backgrounds, and these differences may be growing due to the differential support of natal families. However, existing research and theory that looks at intergenerational social mobility does not fully examine the multi-dimensional aspect of family resources (capital) and how this capital is deployed during transitions to adulthood for contemporary young adults. Therefore, building on the work of Pierre Bourdieu (1986) conceptualization on the forms of family capital, this dissertation uses data from the National Longitudinal Survey for Youth 1997 (NLSY97) and a series of three independent but interrelated papers to examine the relative effects of distinct forms of family capital on young adults' life outcomes, particularly in education achievement and economic well-being.

Chapter 2's main objective is to address the measurement challenges in Bourdieu's framework by identifying the underlying structural factors that constitute the key dimensions of the latent family capital construct. The paper uses 15 select indicators of family resources and processes measures and an exploratory factor analysis (EFA) to identify a four factor model. The 1<sup>st</sup> Factor seems to constitute measures that suggest Parental Involvement, the 2<sup>nd</sup> Factor seems to capture measures of Social Economic Status (SES) of families, the 3<sup>rd</sup> Factor seems to

constitute measures that suggest Social Networks and the 4<sup>th</sup> Factor appears to capture Closeness to Parental Figures.

Chapter 3 examines how the relative effects of these distinct forms of family capital on educational attainment of young adults using Ordinal Logistic regressions. The major finding in the analysis suggested that the different dimensions of the latent family capital construct are a promising and adequate measure, even with the addition of other controls. However, the different dimensions of the latent family capital construct influence educational achievement differently. While Family Involvement and SES are positively associated with higher levels of educational achievement throughout the different models estimated, Social Networks and Closeness-to-Parental Figures are significantly associated with educational achievement only with inclusion of certain controls, namely, the traditional milestones associated with adulthood.

Chapter 4 examines the relative effects of the distinct forms of family capital on young adults' economic well-being, when measured using debt holding and home ownership at age 25 and uses Ordinal Least Square regressions and Binary regressions. The major finding suggests that the different dimensions of the latent family capital construct are not adequate in predicting age 25 economic well-being of young adults, except for the SES dimension on age-25 debt due to a suppressor effect of the educational attainment controls. Discussion of these findings and potential areas of future research and policy/program practice are discussed.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	iii
Chapter 1: Introduction .....	1
Background .....	1
Theoretical Foundation of the Family Capital Concept: Parental Investment Framework .....	4
Significance, Aims & Research Questions .....	6
Outline of Chapters .....	8
References .....	10
Chapter 2: The Latent Structure of Family Capital when Estimated using Measures of Family Resources and Processes .....	13
Introduction .....	13
Methods .....	29
Results .....	34
Discussion .....	40
References .....	49
Chapter 3: The Relative Effects of Different Forms of Family Capital on Young Adults’ Educational Attainment .....	58
Introduction .....	58
Methods .....	71
Results .....	75
Discussion .....	84
References .....	90
Chapter 4: The Relative Effects of Different Forms of Family Capital on the Economic Well-being of Young Adults: Age-25 Debt Holding and Age-25 Homeownership .....	101
Introduction .....	101
Methods .....	120
Results .....	126
Discussion & Implication for Research .....	139
References .....	147

Chapter 5: Conclusions and Future Directions for Research and Practice .....	162
Conclusions Drawn from Papers One, Two and Three.....	162
Future Directions for Research and Practice .....	164
Envisioning a Plan for Programmatic Intervention Research .....	173
References .....	176

## LIST OF TABLES

Table Number	Page
Table 2.1 Measures of the multidimensional Family Capital Construct .....	54
Table 2.2 Sample demographics and Sample Description .....	55
Table 2.3: Correlations for observed indicators of economic, social and cultural capital .....	56
Table 2.4. Principal Axis Factor Analysis of the Family Capital Construct with Promax Rotation .....	57
Table 3.1: Measures of Predicting Educational Achievement .....	96
Table 3.2: Sample demographics .....	97
Table 3.3: Education Achievement by Covariates (Percentages) .....	98
Table 3.4: Sample demographics and Sample Description.....	99
Table 3.5: Unstandardized Coefficient & Odds Ratio from Ordinal Logistic Regression: Models of Educational Achievement .....	100
Table 4.1 1995-2010 Proportion of Debt Holding for Young Adult Households (< 35 years) .....	153
Table 4.2 Measures of Examining Effect of Family Capital and Educational Attainment Process on Financial Well-being and Transition to Adulthood Milestones .....	154
Table 4.3: Sample demographics .....	155
Table 4.4: Zero ordered correlations of Logged Age-25 Debt and Quantitative Predictors .....	156
Table 4.5: Spearman's Rho correlations of Logged Age-25 Debt and Categorical Predictors .....	157
Table 4.6: Spearman's Rho Correlations of Age-25 Homeownership and Quantitative Predictors.....	158
Table 4.7: Age 25 Homeownership Status 2010 by Covariates (Percentages & Chi-Square Statistics)...	159
Table 4.8: Summary of Multiple Regression Models predicting logged Age-25 Outstanding Debt.....	160
Table 4.9: Unstandardized Coefficient & Odds Ratio From Binary Logistic Regression: Models of Homeownership in 2010 .....	161

## ACKNOWLEDGEMENTS

This study is not a project that I single handedly carried out. This research would not have been possible without the help, encouragement and support of many people. Although I may not be able to name each and every person who helped to see this project through, I am truly thankful to everyone who was involved in this research in any capacity.

My first vote of thanks goes to the University of Washington (UW) staff, faculty and students who in some way got involved in this study. I am grateful for the support I received from statistical consultants at the Center for Studies in Demography and Ecology (CSDE), particularly from Anita Rocha. I am also grateful for the student consultants at the UW Center for Social Science Computation and Research (CSSCR). The advice and assistance provided to me while trying to figure out the NLSY97 data and during data analysis is truly appreciated.

I thank the faculty and staff at the School of Social Work (SSW) for their advice and support. I wish to, particularly, thank Dr. Jennifer Romich for her support during the initial part of working on this project. I am also thankful for Dr. Susan Kemp, Kathryn “Kath” Wilham and Maria Tovar Hopper for their support all through my doctoral education.

I also wish to thank my student colleagues for the advice they provide me, for allowing me to brainstorm my not-fully formed ideas with them, for the moral and the technical support and the feedback about many aspects in this study. I am especially grateful to Karen Tabb, Kimberly Hudson, JoAnn Lee, Quentin Red Eagle Smith and Valerie Shapiro.

I also wish to express my earnest gratitude to my family back in Kenya and the one I have adopted here in Seattle. Your unconditional love, confidence in me and support was a great source of strength especially when the going got tough. A special thank you goes to Shauna C. Larson for your love, support and being there for me while working on this project. I am truly lucky to have you in my life.

I thank the UW SSW, UW CSDE, and the U.S. Department for Human and Urban Development (HUD) Office of University Partnership (OUP) whose funding has been instrumental in my doctoral education. Through the Boeing Endowed Fellowship, Teaching and Research Assistantship, Demography Traineeship and the HUD Early Doctoral Student Research Grant (EDSRG) program, the opportunity to carry out this research through your financial support is priceless.

Finally, my deepest gratitude goes to my committee members, Dr. Gunnar Almgren, Dr. Diane Morrison, Dr. Tracy Harachi, Dr. Stewart “Stew” Tolnay and Dr. Marieka Klawitter. Thank you for the advice, insight and helpful feedback you have always given me. I thank you for the moral support you gave me when things went very wrong and deadlines were missed. I will forever be grateful.

## **DEDICATION**

To my mother, Mrs. Alice Wangui Waithaka, who as a single mother raising five children, motivated in me a desire to pursue higher education by constantly reminding me that my only inheritance from her would be an education

## CHAPTER 1: INTRODUCTION

### **Background**

The current cohort of young adults in America is transitioning into adulthood in a period characterized by changing social and economic opportunities. Currently, American society is reported to be experiencing increased levels of social and economic inequalities in virtually every aspect of American life, from wealth, to incomes, to educational attainment, to health care or even job security (Blank, 2011; Page & Jacobs, 2009; Pfeffer, Danzinger & Schoeni, 2013; 2014; Saez, 2012). Social and economic inequality has always existed in American society; however, what is currently concerning is the unprecedented levels and the continuing trends that suggest that this pattern will continue to grow. For example, current estimates of the wealth gap between the rich and the poor suggests that the top 1% of households holds more wealth than the entire bottom 95% (Blank, 2011). Other estimates suggest that even during times of economic growth, inequality patterns do not seem to slow down or reverse course; rather the most affluent of American households seem to increase their wealth even more while the poorest of households appear to not gain any economic ground from the economic boom, and sometimes even fall further behind (Pfeffer, Danzinger & Schoeni, 2013; 2014; Saez, 2012).

For instance, in the years leading up to Great Recession, 2003 to 2007, the American economy experienced an economic boom, particularly in the financial and housing sectors. Recent estimates suggest that while the median net worth of American households increased by about 12.4% (\$87,992 to \$98,872), most of the increase was above the median. Households at the 75<sup>th</sup> and 95<sup>th</sup> percentile saw their net worth increase by 21.8% and 36.3%, respectively, while those at the 25<sup>th</sup> and 5<sup>th</sup> percentile saw their net worth decline by -31.2% and -38.3%, respectively (Pfeffer, Danzinger & Schoeni, 2013; 2014). Similar patterns can also be observed in the decline of wealth and assumption of debt in American households. Specifically, while

during the Great Recession, all households net worth level declined and proportion of decline was relative to family wealth; increases in the level of household indebtedness was also relative to household wealth, with households at the bottom of the distribution having their household indebtedness double (from -\$13,482 to -\$27,416). What is more, during the recovery, evidence suggests that most of the gains are going to the most affluent households. In short, the current cohort of young adults is growing up in a societal context where their families of origin have vastly different capacities to support their transitions into adulthood.

In Social Sciences, and the field of Social Welfare in particular, implication for this trend has generated a lot of questions about the general well-being of poor households in contemporary society (Blank, 2011). Furthermore, for Social Welfare scholars interested in the subject of young adults' transition to adulthood and issues of social mobility, particularly intergenerational mobility, evidence suggests that there is a strong and perhaps increasing relationship between the social and economic background of parents and the life outcomes of their children, youth and young adults in educational attainment, income and wealth holding as well as health outcomes (Berlin, Furstenberg & Waters, 2010; Berzin & De Marco, 2010; Duncan & Brooks-Gunn, 1997; Furstenberg, 2006; 2008; 2010; Guldi, Page & Stevens, 2007; Osgood, Foster, Flanagan & Ruth, 2005; Osgood, Foster & Courtney, 2010; Powell, Steelman & Carini, 2006; Schoeni & Ross, 2005; Stettersten & Ray, 2010a; Whightman & Danziger, 2011). In other words, there is persistence of socioeconomic status between generations casting doubt on the notion that in America the structural obstacles to intergenerational social and economic mobility can generally be transcended through individual efforts.

Familial support for the current cohort of young adults has become even more important because, the process through which the current cohort of young adults is achieving typical adult

roles and statuses has lengthened (Arnett, 2001; Berlin, Furstenberg & Waters, 2010; Furstenberg, 2010; Furstenberg, Rumbaut & Settersten, 2005). Whereas previous cohorts of young adults completed their transition to adulthood milestones, such as finishing school, joining the full-time labor force or establishing independent homes, in their late teens and early-to-mid twenties, the achievement of these same milestones is now seen to be taking place in the late twenties and early thirties. For instance, a recent study by Frank Furstenberg (2010) shows that between 1950 and 2007, the proportion of young adults who were still schooling increased overall regardless of specific age brackets. Specifically, young adults between ages 18-24, 25-29 and 30-34 who were still in school increased from about 14% to 45%, from 2.5% to over 12% and from near zero to 8%, respectively. What is more, similar delays in the achievement of adult milestones can be seen in the age specific rates of joining full-time employment, leaving home, entering marriage, and in child bearing.

A casual look at some of the emerging evidence in the field of young adulthood and intergenerational mobility suggests the following major themes: One, as the transition to adulthood period has become more protracted in the past half century, many young people are increasingly dependent on their families for help during these transitioning years (Osgood et al., 2005; 2010, Schoeni & Ross, 2005; Settersten & Ray, 2010a). Two, the support from families of origin increasingly influences the pathways through which the current cohort of young adults assume adult roles and statuses such as completing an education, joining the labor market, or even establishing independent households (Schoeni & Ross, 2005; Furstenberg, 2008, Settersten & Ray; 2010a). Three, as families differ in the resources they possess and the forms of support they can provide to their young adults, young people from poor and affluent families have vastly different capacities and experiences during this transition to adulthood period that are crucial to

life course outcomes (Berlin, Furstenberg & Waters, 2010; Furstenberg, 2006; 2008; 2010; Guldi, Page & Stevens, 2007; Stettersten & Ray; 2010a; Whightman & Danziger, 2011).

The problem, though, is that existing research and theory have not yielded a detailed understanding of the critical forms of family resources (henceforth family capital) that affect the life chances and life outcomes of young adults, although the evidence is clear that transitions to adulthood for the current cohort of young people differs across categories of class, race and gender (Berlin, Furstenberg & Waters, 2010; Berzin & De Marco, 2010; Furstenberg, 2006; 2008; 2010). Keen observers in the field suggest that the differences are partly a result of the resources natal families marshal to support their transitioning young adults (Schoeni & Ross, 2005, Furstenberg, 2006; 2008, Stettersten & Ray; 2010a). Families use their resources to provide their young adults with access to more resources, opportunities and to smooth the challenges their young ones might face during this transition period. However, there is inadequate theorizing of the general concept of family capital as well as a limited conceptualization of the different forms of capital a family may possess. As a result, existing research does not fully help us understand the social context within which young adults live and develop as well as the key influences during their transition to adulthood. Therefore, this dissertation project seeks to contribute to the literature by examining the multi-dimensional aspect of family capital and the strategies through which this capital is deployed in the period of young adulthood.

### **Theoretical Foundation of the Family Capital Concept: Parental Investment Framework**

A number of frameworks have been proposed by scholars in their attempt to unearth the various ways in which social origins influence life chances. One prominent framework is the Parental Investment Framework. There are two influential yet distinct viewpoints in this

framework; one in the field of economics and the other in sociology. The economic viewpoint has been influenced by the work of Becker and Tomes (1986) and focuses on how parental investments interact with children's natural endowments (abilities) and social opportunities and could lead to differences in life outcomes particularly in earnings and educational attainment (human capital development). Parental investment is seen as either reinforcing or compensating naturally endowed abilities (Becker, 1993; Kim, 2005; Willis, 1986). In sociology, Pierre Bourdieu advanced a similar notion of parental investment from a family capital perspective (1986). Bourdieu proposed that family capital can exist in three distinct forms, that is, as economic, social and cultural. These divergent forms of capital could be invested in children and the activities that children engage in resulting in the development of human capital (educational attainment) as well as habits and preferences which could influence the children life outcomes.

This dissertation will apply Bourdieu's perspective to examine the ways in which contemporary natal families influence the life chances of their transitioning young adults. To be sure, there is research that has attempted to apply Bourdieu (1984; 1986) to empirical work (Lareau, 2000; 2003; Lareau & Weininger, 2008; Schoeni & Ross, 2005; Staff & Mortimer, 2008; Swartz, 2008). However, there are two key limitations in the extant research that this dissertation will seek to address: First, the studies that do apply it to the period of young adulthood rarely use nationally representative data. The exception is Schoeni & Ross (2005) who used a combination of three national datasets: the Panel Study for Income Dynamics (PSID), Nation Postsecondary Student Aid Study and the Decennial U.S. censuses of 1970, 1980 and 1990. Most other studies use small samples which are qualitative in nature. This is largely due to the difficulty of constructing measures such as social and cultural capital from secondary data, including national longitudinal studies.

Second, a critical weakness with extant studies using this framework is that there is a limited conceptualization of the multidimensional nature of family capital as proposed by Bourdieu. For instance, Lareau (2003) and in her follow-up study with her associate Elliot Weininger (2008) divides families into upper and middle class versus working class and poor families without a thorough examination of the family capital possessed by these set of groups. Instead, families are categorized based on the type of job the parent holds. For example, the distinction between upper/middle class versus working families is based on whether at least one parent is in a managerial position or a job that draws on college-level skills, and poor families are classified based on their limited engagement with the labor market or reliance on public assistance. In contrast, this dissertation holds the notion that in contemporary society, social class statuses go beyond this simple categorization of affluence or poorness. This dissertation also holds the notion that through use of latent constructs and advanced statistical techniques, a multidimensional examination of the latent family capital construct will give us more insights into the impact of the socioeconomic background of natal families on the life outcomes of the current cohort of young adults.

### **Significance, Aims & Research Questions**

This dissertation is significant to the field of social welfare because social welfare research and practice could benefit greatly by examining the complexities and pervasive effects of family background on young adults' transition processes and life outcomes. This examination could also help us increase our understanding of the perpetuation of social and economic inequalities in contemporary society. Furthermore, better knowledge of how different kinds of family capital shape young adults' transition processes is instrumental in developing appropriate policies and program interventions to assist young people from poor and low-income families.

Therefore, this dissertation seeks to address these key limitations with three primary research aims. First, this dissertation seeks to re-examine Bourdieu's (1986) conceptualization of the concept of family capital as a multidimensional measure entailing the stock of family resources and family processes. The goal is an attempt to address some of the current measurement limitation, including its use with secondary datasets. Second, this dissertation seeks to apply the multidimensional family capital concept in the study of young adulthood and examine its effect on two critical outcomes, educational achievement and economic well-being of young adults. This application may shed new light on how natal families directly or indirectly deploy their capital to facilitate successful transitions into adulthood for their young adults. Third, from the knowledge gained through conducting this study, this dissertation seeks to propose areas of future promising research and program interventions, particularly aimed at assisting socioeconomically disadvantaged young adults and their families.

The overarching question that this dissertation project seeks to answer is "how do contemporary natal families use their family capital to influence the transition to adulthood process of their young adults?" This dissertation will attempt to answer the overarching question with three independent papers that focus on the effect of family capital on young adults' life outcomes. Each of these three papers is centered on one of the following research questions:

- 1). Is there evidence that family capital is a multidimensional construct? And if so, what are the distinct dimensions that emerge when it is estimated using select measures of family resources and processes?
- 2). Are there dimensions of family capital that affect the educational attainment of young adults?

3) Are there dimensions of family capital that influence the economic well-being of young adults when measured using consumer debt and home ownership?

### **Outline of Chapters**

In this dissertation, the first paper builds on the work of Pierre Bourdieu (1986) on forms of family capital and Annette Lareau's (2000; 2003) work on family processes to explore the latent structure of family capital when estimated using distinct family background resources and processes measures that are economic, social, and cultural. Data for the paper are from the National Longitudinal Survey of Youth 1997 (henceforth NLSY97), a nationally representative sample of 8,984 cohort of American adolescents who were ages 12-16 years at the end of December 1996. The paper uses a sub-sample of the main sample and an exploratory factor analysis (EFA) to examine the underlying structure of 15 selected measures, which are economic, social, and cultural, in the NSLY97 data that represent the multidimensional family capital construct based on Bourdieu's perspective.

For a young person coming of age today, research suggests that advanced education and skills training have become a necessity to the attainment of jobs with sufficient income to support independent living or meet the basic needs of a household (Danziger, & Ratner, 2010; Danzinger & Rouse, 2007; Furstenberg, 2006; 2008; Schoeni & Ross, 2005; Staff & Mortimer, 2008; Stettersten & Ray, 2010a; 2010b; Swartz, 2008). Research also suggests that there are disparities in educational attainment of contemporary young adults partly due to differences in investments by natal families. Furthermore, with increasing educational attainment, many young people are relying on educational loans to finance their educational achievement. Therefore, the second paper in the dissertation will apply the identified dimensions of the latent family capital construct to examine how they influences the educational achievement of young adults. The

paper makes use of Ordinal Logistic Regression to examine how different dimensions of the latent family capital construct predict levels of educational achievement while controlling for select demographic and transition to adulthood milestones as well as educational loans.

As more young people seek post-secondary education and skills training, other key milestones such as getting into full-time employment, leaving home or having children are being relegated into the back burner resulting in a protracted period of semi-independence. When young adults delay achieving economic independence, the implications of this are great, and a growing cadre of scholars are beginning to make the case that the protracted period to adulthood, as well as the assumption of educational debt by many young people, just to maintain their positions in this education “arms race” could have serious implications for young adults’ economic well-being (Danzinger & Rouse, 2007; Stettersten & Ray, 2010a; 2010b). Therefore, the third paper seeks to examine the relative effects of different dimensions of the latent family capital construct on the economic well-being of young adults, specifically focusing on student debt holding and home ownership at age-25, when controlling for select demographic characteristics, transition to adulthood milestones, and educational loans. Consumer debt and home ownership are two sides of the same coin and are particularly crucial measures of young adults’ economic well-being and social functioning of present and future citizenry. This third paper, then, uses a restricted sample of the young adults, that is, only those who enrolled in postsecondary schooling in the 8-years of the study period, 2003 to 2010. Two types of regression analysis will be conducted: multiple regression to predict age-25 debt and a binary logistic regression to predict age-25 homeownership status.

The concluding chapter of the dissertation summarizes the major findings, reviews the lessons learned and explores possible areas of future research and policy interventions.

## References

- Arnett, J. (2001). Conceptions of the transition to adulthood. Perspectives from adolescence through midlife. *Journal of Adult Development*, 8(2), 133-143.
- Becker, G. (1993). Nobel lecture: the economic way of looking at behavior. *Journal of Political Economy*, 101 (3), p. 385-409.
- Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4(3), p. 1-39.
- Berlin, G., Furstenberg, F. & Waters, M. (2010). Introduction the [Special] Issue. *The Future of Children*, 20 (1), p. 3-18.
- Berzin, S. C., & De Marco, A. C. (2010). Understanding the Impact of Poverty on Critical Events in Emerging Adulthood. *Youth & Society*, 42, (2), p. 278- 300.
- Blank, R. M. (2011). *Changing inequality*. Berkeley: University of California Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, Mass: Harvard University Press.
- Bourdieu, P. (1986). The Forms of Capital. In John Richardson (ed.). *Handbook of theory and research for the sociology of education*. New York: Greenwood Press, p. 241-258.
- Danziger, S. & Ratner, D. (2010). Labor market outcomes and the transition to adulthood. *The Future of Children*, 20 (1), p. 133-158.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation
- Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation.
- Furstenberg, F. (2006). Diverging development: The not-so-invisible hand of social class in the United States. *Network on Transition to Adulthood Research Network Working Paper*, March 23-26, 2006.
- Furstenberg, F. (2008). The intersection of social class and the transition to adulthood. *New Directions in Child and Adolescent Development*, 119(Spring), p. 1-10.
- Furstenberg, F. (2010). On a New Schedule: Transitions to Adulthood and Family Change. *The Future of Children*, 20 (1), p. 67-87.
- Furstenberg, F., Rumbaut, R., & Settersten, R. (2005). On the frontier of adulthood: Emerging themes and new direction. In In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On*

- the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Fussell, E., & Furstenberg Jr., F. F. (2005). The transition to adulthood during the twentieth century: Race, nativity, and gender. In R. A. Settersten Jr., F. F. Furstenberg Jr. & R. G. Rumbaut (Eds.), *On the frontier of adulthood: Theory, research, and public policy* (pp. 29-75). Chicago, IL: The University of Chicago Press.
- Guldi, M., Page, M. and Stevens, A. (2007). Family background and children's transitions to adulthood over time. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Kim, H. (2005). Parental Investment between Children with Different Abilities. In dissertation *Three essays using longitudinal sibling data*. 67, no. 09A (2006): p. 3532 - The University of Wisconsin – Madison.
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education*. Lanham, MD: Rowman & Littlefield Publisher.
- Lareau, A. (2003). *Unequal childhoods: Class race and family life*. Los Angeles: University of California Press.
- Lareau, A and Weininger, E. (2008). Class and the Transition to Adulthood. In A. Lareau and D. Conley. *Social class: How does it work?* New York: Russell Sage Foundation.
- Osgood, W., Foster, M. & Courtney, M. (2010). Vulnerable populations and the transition to adulthood. *The Future of Children*, 20 (1), p. 209-229.
- Osgood, W., Foster, M., Flanagan, C. & Ruth, G. (2005). *On your own without a net: The transition to adulthood for vulnerable populations*. Chicago: University of Chicago Press.
- Page, B. I., & Jacobs, L. R. (2009). *Class war? What Americans really think about economic inequality*. Chicago: University of Chicago Press.
- Pfeffer, F., Danzinger, S. & Schoeni, R. (2014). *Wealth Levels, Wealth Inequalities and the Great Recession*. Research Summary: Russell Sage Foundation. Found at [http://web.stanford.edu/group/scspi/media/working\\_papers/pfeffer-danziger-schoeni\\_wealth-levels.pdf](http://web.stanford.edu/group/scspi/media/working_papers/pfeffer-danziger-schoeni_wealth-levels.pdf)
- Pfeffer, F., Danzinger, S. & Schoeni, R. (2013). Wealth Disparities Before and after the Great Recession. *Annals of the American Academy of Political and Social Sciences*, 650(1), pp. 98-123.

- Powell, B., Steelman, L. & Carini, R. (2006) Advancing Age, Advantaged Youth: Parental Age and the Transmission of Resources to Children. *Social Forces*, Vol. 84, (3), pp. 1359-1390.
- Saez, E. 2012. Summary of "Striking it richer: The evolution of top incomes in the United States." Unpublished manuscript. Accessed September 28, 2012 at <http://elsa.berkeley.edu/~saez/saez- UStopincomes-2010.pdf>.
- Schoeni, R. & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Settersten, R. A., & Ray, B. (2010a). *Not quite adults: Why 20-somethings are choosing a slower path to adulthood, and why it's good for everyone*. New York: Bantam Books Trade Paperbacks.
- Settersten, R. and Ray, B. (2010b). What's Going on with Young People Today? The Long and Twisting Path to Adulthood. *The Future of Children*, 20 (1), p. 19-41
- Staff, J., & Mortimer, J. T. (2008). Social class background and the school-to-work transition. *New Directions for Child & Adolescent Development*, 2008, (119), p. 55-59.
- Swartz, T. T. (2008). Family capital and the invisible transfer of privilege: Intergenerational support and social class in early adulthood. *New Directions in Child and Adolescent Development*, 119(Spring), p. 11-24.
- Weininger, E. (2005). Foundations of Pierre Bourdieu's class analysis. In E. O. Wright (Ed.). *Approaches to class analysis*. Cambridge, UK: Cambridge University Press.
- Wrightman, P. & Danziger, S. (2011). Poverty, Intergenerational Mobility and Young adult Education Attainment. *Research Network Working Paper (June)*, Network on Transitions to Adulthood.
- Willis, R. J. (1986). Comment on Becker and Tomes. *Journal of Labor Economics*, 4 (3), p. 40-47.

CHAPTER 2: THE LATENT STRUCTURE OF FAMILY CAPITAL WHEN ESTIMATED USING MEASURES  
OF FAMILY RESOURCES AND PROCESSES

**Introduction**

In the 2012 Olympics games, beyond the many surprising performances by the athletes, one striking thing to note was the number of young athletes whose parents had also been previous Olympic competitors. This was especially the case with particular events such as archery, rowing, swimming and gymnastics - sports that require a great deal of investment in resources (equipment, specialized facilities, expert coaching) and socialization beyond time and effort. Interestingly, most participants in these games were young athletes from developed nations. This is unlikely to be a random coincidence and, for one who is interested in issues of intergenerational social mobility, thus raises the nature versus nurture question. For instance, are second generation Olympians primarily a reflection of genetic endowments, or is advantage in athletics akin to the structure of advantage in other domains of social existence? It is important to note that such trends are not just in sports; rather, in many areas of life such as in educational achievement, and income, including wealth holding, there is evidence that there is a strong and perhaps increasing relationship between the social and economic background of parents and the life outcomes of their children (Berlin, Furstenberg & Waters, 2010; Berzin & De Marco, 2010; Duncan & Brooks-Gunn, 1997; Furstenberg, 2006; 2008; 2010; Guldi, Page & Stevens, 2007; Osgood et al, 2005; 2010; Powell, Steelman & Carini, 2006; Schoeni & Ross, 2005; Stettersten & Ray, 2010a; Whightman & Danziger, 2011).

While there is consensus among scholars that family background matters, the ways in which it matters, and what attributes in the family of origin are most salient in the reproduction of social class statuses has not been fully and comprehensively interrogated. For one, there is a

narrow focus on the types of resources natal families marshal to invest in their children, youth, and young adults. Some scholars employ measures of family resources that are economic, for example income and/or wealth holdings (Conley, 1999-2000; 2004; 2009; Keister, 2005; Schoeni & Ross, 2005; Wightman & Schoeni, 2012). Others focus on social measures such as collective networks, relationships, expectations and support that natal families provide to their offspring (Glanville & Bienenstock, 2009; Lareau, 2000; 2003; Swartz, 2008; 2011). Still other researchers adopt measures that are cultural traits such as habits and dispositions, which natal families impart to their children (Lareau & Weininger, 2008; Mortimer & Staff, 2008). There are also a number of studies that use a combination of these measures (Uno, Mortimer, Kim & Vuola, 2010). In some instances, measures such as family structure, educational and/or occupational levels of parental figures are also utilized as proxies of resources held by the families of origin (Swartz, 2008). While the body of literature on family background and children's achievement is extensive, the measures utilized (either singularly or in combination) cover only a subset of the familial resource dimensions that might be extended to the intergenerational transfer of advantage.

Furthermore, within the existing body of research, there is limited theorizing of the critical forms of family resources (henceforth referred to as family capital) that affect the life chances and life outcomes of children, youth, and young adults. This is despite there being a substantial body of empirical evidence that clearly shows that children and youth from resource rich families consistently fare better than their counterparts from resource poor families in areas such as cognitive development, social development, human capital development as well as in health and wellness (Duncan & Brooks-Gunn, 1997; Eitzen & Johnston, 2007). In addition, there is also limited interrogation of the processes through which families influence their transitioning

young adults towards more positive outcomes and successful adulthood. Even so, a small cadre of scholars such as Pierre Bourdieu (1986), Annette Lareau (2000; 2003) and Teresa Swartz (2008) have attempted to theorize on the multidimensional aspect of family capital with minimal application of their theories to empirical work, principally due to the difficulty of constructing measures such as social and cultural capital from nationally representative datasets. Perhaps the use of advanced statistical techniques that incorporate latent constructs could allow scholars to overcome this challenge. Therefore, building on Pierre Bourdieu's work, this paper seeks to examine the emergent latent structure of family capital when estimated using measures of family resources and processes.

Family capital in this paper is conceptualized as consisting of the stock of resources a family possesses that are consumed or invested in children to enhance their life chances, well-being, functioning and life outcomes. Consistent with Bourdieu's (1986; 1997) conceptualization, family capital is assumed to be multidimensional, that is, it can exist in the form of economic, social and cultural resources. Families use their resources as leverage to provide their young ones with access to more resources, and opportunities, and to help overcome the challenges their children might face during adolescence and in the period of transition to adulthood. While, family capital is hypothesized to be central to children's life outcomes, it is not necessarily the exclusive force that enhances children's achievement. Other factors such as individual agency, family structure and size, race, nativity, geographical locations as well as societal and institutional forces may come into play and have an effect on the life outcomes of individuals as well as the stock of resources a family holds. For instance, family structure and sibship size could also affect the stock of family capital (Becker & Tomes, 1986; Berlin, Furstenberg & Waters, 2010; Keister, 2005; Kim, 2005; Massey, 2007; McLanahan & Percheski,

2008; McLanahan & Sanderfur, 1994; Rambaut & Komaie, 2010). That acknowledged, the focus of this paper is on the forces that could be assumed to influence life chances and outcomes of contemporary young adults through parental resources and processes - as conceptualized by Pierre Bourdieu (1986).

This study builds upon and extends the current literature by developing a multidimensional measure of family capital that attends to some of the current conceptualization and measurement limitations of the concept. The hope is that this study will contribute to the field of social welfare research and practice by examining the complexities and pervasive effects of different kinds of parental resources on young adults' transition process and life outcomes that contribute to the perpetuation of social and economic inequality in contemporary society. Furthermore, better knowledge of how family capital shapes young adults' transition process, could help social welfare researchers and practitioners be at the forefront of developing appropriate policies and program interventions to assist young people from disadvantaged backgrounds/families.

This paper will proceed as follows: First, it begins by briefly discussing why a multidimensional examination of family capital matters in contemporary society as well as a review of relevant research. Second, it lays down the theoretical foundations of the multidimensional measure of family capital. Third, it employs the National Longitudinal Survey for Youth 1997 (NLSY97) to examine the latent structure of family capital that includes the economic, social and cultural dimensions. Finally, it concludes with a discussion of major findings and areas of further research utilizing the latent family capital construct.

### **Why Family Capital Matters for Contemporary Young Adults?**

An examination of a multidimensional measure of family capital within contemporary society is important because, over the last three-to-four decades, the world has experienced significant structural changes in the political economy, particularly in what economic development researchers refer to as the developed nations. These structural changes have coincided with change in the life course transition process. That is, as fertility and mortality have declined, there have been corollary transformations in the process and duration through which young people achieve typical adult milestones such as finishing schooling, joining full-time employment, establishing independent homes and family capacities (getting into long-term relationships and becoming parents). Furthermore, these structural and demographic changes have become a powerful impetus that has necessitated contemporary families to make changes in the ways they bring up their children.

These structural changes in life course transitions also have their roots in earlier structural changes in the political economy after World War II. Increased industrialization and advancement in technology altered economic production and economic opportunities for many young people coming of age (Danziger & Rouse, 2007; Esping-Anderson, 2004; Furstenberg, Rumbaut & Settersten, 2005; Settersten & Ray, 2010). More economic opportunities emerged as a result of the shift from a purely industrial/manufacturing economy to a mix of a variety of production and service sectors driven by innovations in technology. In addition, the cost of living, relative to wages, made it easier for workers to lead decent lives. At the same time, there were significant social and institutional changes that promoted social mobility. For instance, in the United States, there was enormous expansion in the higher education system during the post-World War II era. In addition, about two decades later, with the passage of the Civil Rights Act

in 1965 and with the post-civil rights legislations, the structure of the political economy continued to provide opportunities for many Americans to improve their skills despite disadvantages of social background (Conley, 1999-2000; Esping-Anderson, 2004). As a result, many scholars anticipated that mobility would increasingly become decoupled from the class positions of one's origin (Esping-Anderson, 2004).

However, over the last four decades, rapid technological innovations coupled with a neoliberal economic policy agenda, that emphasizes the free flow of capital across borders and *laissez faire* labor policies, have significantly altered the economic structure of many economies in the developed countries. At a macro level, the benefit to these changes has been greater interconnectedness of capital, goods and services within nations and around the world. In addition, there have been improvements in productivity, consumer choice and material welfare to mention just a few (Danziger & Rouse, 2007). However, neoliberal economic restructuring has resulted in serious problems such as loss of jobs, deteriorating working conditions, high financial instability, ecological and environmental degradation and increased social and economic inequalities. At the micro level, for many young adults coming of age in contemporary societies, these structural changes are characterized by a political economy where long-term employment tenures have become less common, the cost of independent living (particularly housing) has skyrocketed, and advanced education and skills training have become a necessity for the attainment of jobs with sufficient income to meet the basic needs of a household (Aronson, 2008; Danzinger & Rouse, 2007; Furstenberg, 2006; 2008; Schoeni & Ross, 2005; Staff & Mortimer, 2008; Settersten & Ray, 2010; Swartz, 2008).

These structural changes coincided with changes in life course transitions for contemporary young adults. Whereas previous cohorts of young adults were seen to complete

their transition to adulthood milestones, such as finishing school, joining the full-time labor force or establishing independent households, in their late teens and early-to-mid twenties, the achievement of these same milestones is now taking place in the late twenties or early thirties (Arnett, 2001; Berlin, Furstenberg & Waters, 2010; Furstenberg, 2006; 2008; 2010; Furstenberg, Rumbaut & Settersten, 2005; Settersten & Ray, 2010). Unfortunately, the above structural changes and the protracted transition to adulthood process has also coincided with an increasing retreat of the social and public policies that provided instrumental support to disadvantaged populations during this crucial period (Furstenberg, 2008; Osgood, Foster & Courtney, 2010; Osgood, Foster, Flanagan & Ruth, 2005). For instance, in the domain of higher education, the share of public support to institutions of higher learning and to low-income families (in grants/loans) has declined rapidly in the U.S. Consequently, colleges and universities are responding by increasing the private share of the costs of providing higher education, essentially transferring these costs to young adults and their families and thus giving new life to the class advantages in higher education that had been mitigated through social and public policy post-WWII era. Therefore, parental resources are continuing to play an even larger and longer role in young adults' lives (Berlin et al., 2010; Furstenberg, 2006; 2008; 2010; Schoeni & Ross, 2005; Swartz, 2008).

Some scholars have argued that it is not just the poor families that are disadvantaged in this context; it is also the middle class who do not have as many resources and who were not planning to provide support to their children for a protracted transition to adulthood (Rumberger, 2010; Settersten & Ray, 2010a). As a result, and contingent on the stock of resources possessed by natal families, young adults from affluent and poor families have vastly different opportunities and capacities in the current transition to adulthood (Furstenberg, 2006; 2008;

2010; Osgood et al., 2005; Osgood et al., 2010; Swartz, 2008). Interestingly, it is not only scholars who seem to be cognizant of these changes; the parents of the current cohort of young adults appear to be equally aware and this has resulted in a fundamental shift of parenting strategies, especially for the middle-class families (Keister, 2005; Lareau, 2000; 2003; Lareau & Conley, 2008; Schoeni & Ross, 2005; Stettersten & Ray, 2010a; Whightman & Danziger, 2011; Whightman, Schoeni, & Robinson, 2012). For instance, in the educational sectors, affluent parents are saving no effort to ensure that their children get ahead in education and stay ahead. They are paying for extra tutoring, enrolling their children in resource rich school districts and taking an active role in their children's postsecondary education. A study by Whightman & Danziger (2011) found that the gap in college completion has remained unchanged (or even increased) over the past 30 years between young adults (aged 25) from low- and high-income families as well as between those whose parents have low and high educational attainment. In yet another study, these authors found that access to family support is increasingly important for the current cohort of young people and they estimated that parents were providing approximately \$7500/year to their young adults - 19-22 year olds (Whightman, Schoeni, & Robinson, 2012). This study was a follow up to an earlier study by Schoeni and Ross (2005), who had found that parental assistance to contemporary young adults' averaged \$2200/year during 17 years of transition to adulthood (18-34 years).

It is not just in economic matters for which contemporary parents are seen to be contributing to the well-being of their young adults. In fact, economic assistance is episodic, largely aimed at meeting specific needs of the young people. Other non-material (non-economic) support is more pervasive and more routine, but is rarely acknowledged in the literature. As some research has shown, such non-material support can be a powerful force of support in

contemporary young adult lives. For instance, natal families act as safety nets when they provide support through difficult times by providing housing (Swartz, 2011), or support with childcare for their young adults who have children (Swartz, 2008) or counseling during their high school to college transition (Lareau & Weininger, 2008) or during college in making academic and career decisions (Lareau, 2000: 2003; Lareau & Weininger, 2008; Levin & Dean, 2012) and even after college during their school-to-work transitions by providing emotional support, informational support including strategies to successfully navigate the different social contexts and systems during the transition to adulthood years. Altogether, these and similar findings generate serious questions about factors related to persistence of socioeconomic status between generations. In other words, parents have changed their parenting styles and many are strategizing and investing all they can to make sure their young adults get ahead in life and stay ahead. Consequently, this has resulted in the strengthening of intergenerational flows of accumulated advantages or disadvantages.

### **Theoretical Background**

Researchers in the field of intergenerational social mobility utilize several frameworks to study how family background influences individual's life chances/outcomes. These include, but are not limited to, the Status Attainment Framework, the Life Course Perspective and the Parental Investment framework to mention just a few dominant frameworks. All of these frameworks attempt to investigate the relationship between an individual's social and economic background and their life chances or life outcomes focusing on different family attributes and mechanisms. Specifically, the Status Attainment Framework is used by researchers to examine the pathways, direct or indirect, through which the social economic status achievement of parents is associated with the status attainment of their adult children (Blau & Duncan, 1967; Bowles,

Gintis, Groves, 2005; Mazmuder, 2005). The Life Course Perspective is used by researchers to examine peoples' lives and how these lives are "socially organized in biological and historical time" and across changing context (Elder, 1998, p. 9). The Parental Investment Framework is used by researchers to examine the pathways through which families' deploy their stock of resources with the aim of increasing the likelihood of positive life outcomes in their children (Becker & Tomes, 1979; Bourdieu, 1986; Lareau 2000; 2003). Decades of evidence utilizing the above frameworks suggests that each has some merit (Bowles, Gintis, Groves, 2005; Furstenberg, 2006; 2008; Lareau & Conley, 2008; Keister, 2005; Mazmuder, 2005; Schoeni & Ross, 2005; Staff & Mortimer, 2008; Swartz, 2008). However, while these frameworks have greatly enhanced our understanding of the pathways through which advantage is transferred from one generation to the next, there remain significant gaps and unanswered questions. For instance, what resources are natal families marshalling during transitions to adulthood for their contemporary young adults? What are the mechanisms through which resources marshalled are being deployed to facilitate successful transitions to adulthood? What combinations of resources are most salient for the current cohort of transitioning young adults in American society? While these questions could be interrogated from the above dominant perspectives, an expanded version of the Parental Investment framework holds particular promise for addressing some crucial unanswered questions because it allows us to examine both family resources and family processes. Therefore, this study's theoretical foundation about the role of family capital on intergenerational social mobility is primarily derived from the Parental Investment Framework.

Within this framework there are two distinct viewpoints, one from economics and the other from sociology. The economic point of view builds from the work of Gary S. Becker (1981) and Becker and Tomes (1986), which focuses on parental investment in children, and

subsequent outcomes in earnings and/or educational attainment (human capital development). This perspective posits that parents, like other actors in a free market, are rational actors and they make decisions to maximize their utility by comparing their benefits and costs. They make decisions about the number of children to have as well as how much and what type of investments to make in each child. Investment objectives in children, in areas such as education, are primarily aimed at maximizing marginal returns or lowering costs. Becker and Tomes also argue that parental investment interacts with children's natural endowments (abilities) and social opportunities and could result in differences in life outcomes. However, parental investment is seen as either reinforcing or compensating naturally endowed abilities (Becker, 1993).

In sociology, Pierre Bourdieu advanced a similar notion of parental investment from a family resource (capital) perspective (1986). Bourdieu's main proposition is that families have varying levels of capital that could be economic, social and/or cultural. These divergent forms of capital could be invested in children and in the activities that children engage in resulting in the development of human capital (such as educational attainment and skills training) as well as habits and preferences which could influence individual life outcomes.

Although these two perspectives focus on how parents raise their children for subsequent positive outcomes, particularly with regard to human capital development, and they both seem to use similar terminologies (for example, investments and capital), they are fundamentally different in their conceptualization of how advantage is transferred between generations. Becker's perspective focuses mainly on the calculations and decisions that rational actors make to maximize their benefits and costs (utility) and primarily employs economic/financial factors in the inputs and outputs of a given parental investment situation. Bourdieu's perspective, on the other hand, views parents also as actors but driven by "interests" and "strategies" and focuses

both on economic and non-economic factors, such as social and cultural resources, which he argues may perhaps be equally important, if not the key, factors in the equation (Grenfill, 2005). For instance, he argues that in educational achievement, it is important to both focus on the monetary inputs by parents as well as the socialization, cultural orientation and knowhow that high status parents may possess and transfer on to their children that may result in educational success.

This study, therefore, builds on Bourdieu's perspective of parental investments because parental resources invested in children in Bourdieu's framework have a multidimensional configuration entailing economic, social and cultural components. The economic component was assumed to constitute material and financial wealth. The social component he argued to be the aggregate of actual or potential resources derived from the pool of one's social network of relationships, which could be more or less institutionalized. He envisioned cultural capital to be the habits, attitudes and preferences that children are socialized into that can be used as resources to navigate a variety of social systems and contexts (Bourdieu, 1986). In other words, economic capital involved monetary resources, social capital involved resources or benefits derived from ones social connections while cultural capital involved knowledge about social behavior deliberately imparted to help an individual function effectively in a social context.

Bourdieu further argued that this multidimensional family capital framework could be seen as a model with three orthogonal axes (Bourdieu, 1986; Weininger, 2005). The first axis constitutes of the total volume of capital (economic, social or cultural) possessed by an individual/household. Bourdieu argued that an individual's social position is a result of the *volume* of capital possessed, such that the dominant group is at the top of the axis with the most resources, the least dominant group is at the bottom with the least resources, and there are those

in the middle. It is important to note that Bourdieu conceptualized this axis as a continuum of advantages and disadvantages, rather than a categorical replication of class structure. On the second axis, class positions are differentiated based on the *composition* of capital possessed. Bourdieu argued it was possible to differentiate between those who had a lot of economic, social and cultural capital versus those who had a lot of economic capital but little social or cultural capital and vice versa. At the time of his writing, in the 1960s-80s, it was possible to differentiate groups of people who would neatly fit into this second axis. For example, Bourdieu (1986) assumed that privileged groups, were made up of corporate heads who had a lot of capital in all the three dimensions while other groups, especially those that were highly educated but had little command of economic resources such as professional workers (teachers, college professors, counselors and even the clergy), could have a lot of social or cultural capital but little economic capital. It is important to note that the society has changed in complex ways and the above categorization example may not accurately reflect groups who hold different compositions of capital in contemporary society. On the third axis, Bourdieu proposed that class positions could be differentiated according to the *stability or change* (over time) of both the volume and composition of capital the incumbents enjoy. In other words, Bourdieu argues that the volume and composition of capital possessed by an individual could change over time either vertically (along the first axis – mobility up/down) or horizontally (along the second axis – moving from having lots of economic capital to more of cultural capital). In this horizontal change, one kind of capital (usually) begets or is converted into more of another form. Bourdieu further stated that individual or household positions in this structure are not fixed but are continuous and exist in “social spaces” where class dynamics take place.

Bourdieu's framework is extensively cited in the literature, and has both proponents and skeptics (Bodovski & Farkas, 2008; Grenfell, 2005; Lareau & Weininger, 2003; Swartz, 2008; Swartz, 2007b; Weininger, 2005). Popular criticisms include the methodological difficulties of measuring the concepts of family capital using existing data. Also, there is confusion around some components, particularly social and cultural capital (Lareau & Weininger, 2003; Weininger, 2005). For instance, knowledge of an important social connection could count as either cultural capital (the knowledge) or social capital (the connection). Therefore, this has led to a partial application of the model where only one or two forms of capital are used to conceptualize social class arrangements. Furthermore, some elements in the model such as economic capital have been used as a matter of faith without proper conceptualization or operationalization. However, advanced statistical techniques and statistical software innovations, particularly through use of latent class models have enabled researchers (even novice scholars) to overcome some of these conceptual and measurement challenges. Unfortunately, there is no study that has attempted to apply Bourdieu's multidimensional family capital concept in total. What we have thus far is selective use of one or two of the dimensions of capital.

For instance, Annette Lareau (2000; 2003) has attempted to extend Bourdieu's work by focusing on parenting practices based on social class statuses and children's life chances in a conceptual framework she refers to as *concerted cultivation*. *Concerted Cultivation* is a form of parenting style where parents invest in their children and nurture the development of a variety of skills (self-advocacy or assertiveness) and talents (athletic, arts or music) – various common traits of those who possess elite social status. According to Lareau (2003), this form of parenting is for the most part found among upper and middle class families. Lareau argues that upper and middle class families are more likely to encourage in their children the development of

characteristics such as autonomy, assertiveness and self-direction. In addition, they create learning opportunities whereby their children learn how to communicate, interact and access beneficial social networks. Lareau further observed that this kind of parenting style is very different from what happens in working-class and poor families. In working class families, parents do not actively foster their children's skills and talents; rather the development of children's skills and talents is perceived to unfold spontaneously with time (natural growth) as long as basic necessities are provided. Here, parents are more likely to emphasize obedience to authority. In addition, children's activities are less structured unlike in the upper and middle class families where they are organized as projects. Lareau identified four major areas where families can invest in their children, namely, in perceptions, in language patterns, in activities children engage in, and in their interaction with social institutions (Bodovski & Farkas, 2008; Lareau, 2003; Swartz, 2008).

This refinement of Bourdieu's complex theoretical framework by Lareau (2000; 2003) and Lareau and Weininger (2008) encourages researchers to extend their focus beyond what resources parents possess to include what parents do. Even with this refinement, there are two key limitations in the extant research that this study will seek to address:

First, the studies that do apply Bourdieu's framework to the period of young adulthood rarely use nationally representative data. The exception is Schoeni & Ross (2005) who used a combination of three national datasets: the Panel Study for Income Dynamics (PSID), the National Postsecondary Student Aid Study and the Decennial U.S. censuses of 1970, 1980 and 1990. Most other studies use small samples which are qualitative in nature. Again, this is principally due to the difficulty of constructing measures such as social and cultural capital from nationally representative data.

Second, a critical weakness with extant studies using this framework is the limited conceptualization of the multidimensional nature of family capital. For instance, Lareau (2003) and in her follow-up study with her associate Elliot Weininger (2008) dichotomized families into upper and middle class families versus working class and poor families without a thorough examination of the family capital possessed by these groups. Instead, families are categorized based on the type of job the parent holds. For example, the distinction between upper/middle class and working families is based on whether at least one parent is in a managerial position or a job that draws on college-level skills, and poor families are classified based on their limited engagement with the labor market or reliance on public assistance. In contrast, this study holds the notion that in contemporary society, social class structure goes beyond this simple categorization of affluence or poorness that relies heavily on occupational status and income sources as an omnibus measure of parental resources.

Therefore, the main goal of this study is to begin filling this gap by using nationally representative data of young adults to examine the key dimensions and measures of family resources (referred to as family capital) as advanced by Pierre Bourdieu and extended by Annette Lareau, and the extent to which family capital appears to influence young adult outcomes. The specific aim is to identify the underlying structural factors that constitute this family capital construct. A secondary goal of this study is to apply the underlying structural factors in the family capital construct in subsequent analysis to predict young adults' outcomes in educational attainment, financial well-being, asset building and family capacities. If the old adage "the whole is more than the sum of its parts" still holds true, a multidimensional examination of family capital using latent class models will give us more insights into the impact of the socioeconomic background of natal families on the life outcomes of the current cohort of young adults.

In summary, this paper seeks to examine the question, what are the distinct dimensions of the latent construct family capital when estimated using measures of family resources and processes that could be economic, social and cultural?

### **Methods**

Data for this paper are from the National Longitudinal Survey of Youth 1997 (henceforth NLSY97). The NLSY97 is a nationally representative data set with an initial sample of 8984, for a cohort of American adolescents who were ages 12-16 years at the end of December 1996. The most recent data available is for the 14th wave (up to 2010), when respondents were between 26 to 30 years. This study will only use a subsample of the initial sample because measures of family processes used as indicators of social and cultural capital were only administered to respondents who were 12-14 years-old in 1997. Respondents who were 15-16 years old were therefore dropped from this analysis. Also, 46 individuals who identified as being of mixed race were further dropped to prevent difficulties in making estimation and prediction for such a small group. Therefore, the final sample for analysis was  $N=4707$ .

The NLSY97 was deemed most appropriate for this study for several reasons: One, it is a large nationally representative sample of American youth. Two, the youth sampled entered into young adulthood within the last decade. Three, the NSLY was designed to specifically track the experiences of young people in America as they transition into the worlds of school, work and family formation. Furthermore, baseline interviews in 1997 were conducted for both the youth and their parents. Therefore, it is possible to examine the relationship between the family background influences in the natal families and later life outcomes of these young adults.

This study will use an exploratory factor analysis (EFA) to examine the plausibility of a multidimensional conceptualization of the theoretical construct -family capital - that includes

economic, social and cultural aspects. An EFA technique was deemed to be most appropriate because this paper seeks to examine the underlying structure of the key dimensions in the selected indicators as well as examine the internal reliability for items in the factors that represent the theoretical latent construct (Tabachnick & Fidell, 2007). An EFA was also used due to the lack of theoretical specificity between the NLSY97 indicators and hypothesized dimensions of family capital. When the latent structure is revealed, the identified structural factors will then be used to define the key dimensions of the proposed latent construct, family capital. What follows is a brief discussion of observed measures utilized as indicators in the construction of the family capital construct.

### **Measures of Family Capital:**

**Economic capital:** In the NLSY97 data, economic resources of the family are reported in a variety of ways such as household income, or household net worth, or the household's income to poverty ratio level. Household income and net-worth were reported by both the parent and the youth during baseline interviews (1997) and then updated for the next five Waves until 2003. Two indicators of family economic resources were considered in measuring this construct, namely, *Household Income* (reported pre-tax) and *Net-Worth* as reported by the parent and the youth. An *Average of Household Income (AveGrossInc)* over the five years (1997-2003), as reported by the parent, was computed to approximate permanent household income status of the family. A Family's *Net-Worth* measure, also as reported by the parent, was created by the NLSY97 data archivist and was computed by subtracting the total value of household debt from total value of assets. Similarly, an *Average Household Net-Worth (AveHHNetworth)* indicator was computed over the five Waves of data collection, 1997-2003, to estimate permanent wealth holding of families in the sample.

**Social capital:** This paper conceptualizes social capital as consisting of two major components, social networks and social exchanges (or support). Eight indicators were selected to measure the social capital construct (See Table 2.1).

***Social networks.*** Six indicators were used to measure this construct. Three indicators measured the number of people a respondent could turn to for advice about *relationships problems; school, employment or training problems* and *finances problems*. For each of the above areas, a respondent was also asked “*of the people to turn to, who would you turn to first?*” The three indicators were coded as ordinal with values ranging from 1= biological mother, 2= biological father, to siblings, partners, co-workers, other professionals to 13=no one. Each of these indicators was collapsed into seven categories with values ranging from 1= parental figures (biological, step and adoptive parents), 2= relatives (siblings and relatives), 3= significant others (spouse, partner, boyfriend/girlfriend) to 7= no one. Since variables in the EFA are assumed to be ordinal or continuous, these categorical variables would not work well in the analysis. Therefore, they were further collapsed into dummy variables *DmmyRel*, *DmmSchEmpTrn* and *DmmyFinance* with values 1= parental figures and 0 = everyone else.

***Social support.*** A created scale indicator that measured how supportive the parent-youth relationship was, was also employed as the final observed measure of social capital. Data for this indicator were only collected in the 1<sup>st</sup> three Waves (1997-1999) of data collection. The original indicator was an eight item scale, created by the data archivist, with three questions assessing the respondent’s admiration of the parent (*I think highly of him/her; S/he is a person I want to be like; and I really enjoy spending time with him/her*) and five questions assessing the respondent’s perception of how supportive the residential mom or dad was to them (*How often does s/he praise you for doing well? How often does s/he criticize you or your ideas? (reverse code); How*

*often does s/he help you do things that are important to you? How often does s/he blame you for her problems? (reverse code); How often does s/he make plans with you and cancel for no good reason? (reverse code).* Responses were measured on a 5-point scale with values ranging from 0 to 4. The values in the original created scale had scores ranging from 0 to 32 with higher scores indicating a more supportive relationship. An average social support scale for the three Waves was computed as indicators of *supportive relationship with residential mom* (*AveSupportResMom*) and *supportive relationship with residential dad* (*AveSupportResDad*).

**Cultural Capital:** Researchers have conceptualized this construct in a variety of ways as including “knowledge of high culture,” “the symbolic mastery of practices,” “capacity to perform task in culturally acceptable ways,” or “symbols [or codes] that accord with specific class interest” (Lareau & Weininger, 2003). In this study, cultural capital is conceptualized as an attribute that is strongly correlated with the parental education level, family processes as well as measures of the home environment that could influence positive child development, such as close parental monitoring, and an enriching childhood developmental environment. Five indicators were employed to measure this construct:

***Parental education.*** Two indicators measured *residential parent highest grade level completed by residential mother and father* (*CV\_HGC\_Res\_Mom 1997* and *CV\_HGC\_ResDad 1997*). These indicators are created by the data archivist on an ordinal scale with values that range from 0= none/no schooling to 20= 8 years of college or more.

***Family processes.*** Three indicators were employed to assess family processes and included two indicators that measured the *average degree of monitoring by residential mother/father*. The original indicator was a four item scale, created by the data archivist from the following questions: *How much does he/she [residential father or mother] know about your close friends, that is, who*

*they are? How much does he/she know about your close friends' parents, that is, who they are? How much does he/she know about who you are with when you are not at home? How much does she know about who your teachers are and what you are doing in school?* Responses were measured on a 5-point scale with 0= knows nothing; 2= Knows Just a little; 3= Knows some things and 4= knows everything). A scale was created with scores ranging from 0 to 16; higher scores indicate greater parental monitoring. Data for this indicator were collected only during the 1<sup>st</sup> four Waves (1997-2000). An average parental monitoring variable was computed for residential mother (*AveMomMont*) and residential father (*AveDadMont*) using the same scale of measurement. Last, one indicator was used to measure the home environment. This indicator was an index created by the data archivist using three items, *presence of a computer in the home* (0= not enriching; 1= enriching), *presence of a dictionary in the home* and *taking extra classes such as music, dance or foreign language*. The Enriching Environment Risk Index 1997 (*HomeEnrichEnv*) had scores ranging from 0 to 3; with higher scores indicating a more enriching home environment.

### **Plan of Analysis:**

The first step involved data exploration of selected variables and a preliminary descriptive data analysis to examine the frequencies, distributions, values of central tendencies, skewness and kurtosis of every selected variable as well as address data issues such as missing data, outliers, and multicollinearity issues. The second step of data analysis consisted of an exploratory factor analysis (EFA) to identify the underlying structural factors of selected measures in the data. After a careful assessment of the EFA model and loadings on the factors that emerged, the third and final analysis step involved performing an internal consistency analysis for items in each of the factors to assess construct validity of items in the retained

factors. Data analysis involved use of SPSS (PASW now) version 20.0 for data cleaning, management and EFA analysis.

### **Results:**

The total N for this analysis is 4707. About half of the sample were male and the rest were female. Also, a little over a half (53.1%) identified as White (Non-Black/Non-Hispanic), about a quarter identified as Black, and about a fifth of the sample identified as Hispanic (see table 2.2). These young adults' came from households with a 5-year average household income of \$51,115 ( $SD$ =\$44,010). The median was a little lower at \$40,100 (this results are not in table 2). When the young adult respondents had personal problems, they reported that they had on average 5 people they could turn to when faced with a relationship or school/employment/training problems, respectively. However, when faced with a financial problem, on average they had only 3 people they could turn to. A majority of them would first turn to a parental figure for financial and school/employment/training issue. However, when faced with a relationship issue, less than half of them (42.3%) would do so. On a scale of 0 to 32 (higher values indicating more supportive relationships), on average our young adults reported they had more supportive relationships with both residential moms (24.6,  $SD$ =4.22) and residential dads (23.9,  $SD$ =5.20). When it comes to parental monitoring of the young adults on a scale of 0-16, young adults reported more monitoring from residential moms (9.9,  $SD$ =2.71) than residential dads (7.5,  $SD$ =3.45). Surprisingly, residential parental figures had similar levels of education, that is, on average a little over high school education. Last, when asked on a scale of 0 to 3 how enriching their home environment was, young adults in this sample reported an average of 1.74 ( $SD$ = .77).

Preliminary examination of the data showed that for several of the indicators, missing values were an issue. Thus, SPSS missing values analysis (MVA) was conducted for all selected indicators to assess patterns of missing values. Results showed that there was substantial missing data in six indicator variables, namely, *supportive relationship with residential dad* (*AveSupportResDad*), *highest grade level completed by residential mom* (*CV\_HGC\_Res\_Mom 1997*), *Average monitoring by residential father* (*AveDadMont*) and the dummy coded indicators of the first person the youth would turn to for advice about *relationships; school, employment or training* and *finances* (*DmmyRel*, *DmmySchEmpTrn* and *DmmyFinances*). Missingness in these indicators ranged from 20.0 - 43.2%. Another four variables had missing data between 9.9 and 11.8%. These variables included the three indicators of *the number of people a respondent could turn to for advice* about *relationships; school, employment or training* and *finance* (*NumHelpRelationship*, *NumHelpSchEmpTrn* and *NumHelpFinance*, respectively) and the *highest grade level completed by residential dad* (*CV\_HGC\_Res\_Dad 1997*). Missing data for the remaining variables was less than 4%. An examination of the missing pattern using Expectation Maximization (EM) method did not show large discrepancies between the original mean values and the estimated (EM) means. Also, there did not appear to be any systematic relationship between the prevalence of missing values for particular variables when Separate Variance t-Test was examined. In addition, EM correlations, with missing values filled in, using EM method showed slight improvements. However, the Little's MCAR test of whether the data was missing completely at random (MCAR) was significant  $\chi^2(586) = 1838.62, <.05$ , indicating that the data was missing at random (MAR). That is, prevalence of missing values was not completely at random (MCAR) and could be affected by presence of other variables in the data. The Expectation Maximization (EM) method of addressing missing values was employed to

impute missing values by creating a new complete dataset to use in the analysis. Further exploration of the data revealed that there was some skewness and non-normality of the data. Several steps were taken to address this. For example, average gross income of the household (*AveGrossInc*) was transformed using the base of log10 to create a new income variable (*NewGrossInc*). Evaluation of results showed that this transformation worked. However, several transformation attempts of the average household net worth (*AveHHNetworth*) did not seem to address the moderate positive skewness (3.539), and so this variable was dropped in further analysis. Examination of univariate and multivariate distributions revealed violation of the normality assumption in some variables. However, this was not considered to be a serious threat to violation of assumptions of EFA because it is still robust to reasonable violations especially for large sample data (Warner, 2008). Also, SPSS and Amos 20.0 is equipped with a bootstrapping capability procedure to address non normality in data distribution, and this procedure was also employed in data analysis as recommended by various scholars (see Byrne; 2001 and Davison & Hinkley, 2009; Warner, 2008).

Bivariate Analysis using zero-order Pearson r correlation was also conducted. All variables were significantly and positively correlated with each other (See Table 2.3). However, the correlation ranged from moderate to weak in strength. Three pairs of correlations had values greater than .60, namely, *average parental monitoring by residential Mom (AveMomMont)* with *average parental monitoring by residential dad (AveDadMont)*; *average parental monitoring by residential dad (AveSupportResDad)* with *average parental monitoring by residential dad (AveDadMont)* and *highest grade level completed by both residential parents (CV\_HGC\_Res\_Dad 1997 & CV\_HGC\_Res\_Mom 1997)*. Four pairs of variables had correlations around .50, namely, *average parental monitoring by residential Mom*

(*AveMomMont*) with *average supportive relationship with residential mom* (*AveSupportResMom*); *average supportive relationship with residential mom* (*AveSupportResMom*) with *average parental monitoring by residential dad* (*AveDadMont*); *number of people to turn to with relationship problem* (*NumHelpRelationship*) with *number of people to turn to with school/employment/training problem* (*NumHelpSchEmpTrn*) as well as with *number of people to turn to with financial problem* (*NumHelpFinance*), and the pair *number of people to turn to with school/employment/training problem* (*NumHelpSchEmpTrn*) with *number of people to turn to with financial problem* (*NumHelpFinance*). The rest of the variables had correlations below .50.

### **EFA Assessment**

To recap, this analysis seeks to examine the question, *what are the distinct dimensions of the latent construct family capital when estimated using measures of family resources and processes that could be economic, social and cultural?* The assessment of sampling adequacy suggested that the EFA model was adequate. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .66, just about the minimal recommended value of .6, and Bartlett's test of sphericity was significant  $\chi^2(91) = 9824.12, P < .05$ . Also an assessment of the reproduced correlations in the correlation matrix R was reasonably good. Only 7% of the prediction errors (residuals) for the reproduced correlations were larger than .05 in absolute value. Altogether, this model assessment statistics fit tests suggests that our model is adequate and we can proceed with our EFA assessment.

To assess dimensionality of the 15 selected measures of the concept family capital, EFA using Principal axis factoring (PAF) was used with the default criterion set to retain only factors with eigenvalues greater than 1 in the initial solution. In addition, during the Promax rotating of

factors, a restriction was set to load only items with coefficients  $>$  than .20 in order to realize conceptually meaningful factors. Also, an oblique rotation using Promax was deemed best for two reasons: One, theoretically the factors in this model are assumed to be correlated as they provide different dimensions of the family capital construct. Two, an examination of the factor correlation matrix revealed that some factors (Factor 1 & 4) had correlations of .32 and above. Tabachnick and Fidell (2007), recommended that if correlations exceed .32, then there is a higher likelihood of a 10% or more overlap in variance among factors, and therefore, an oblique rotation is warranted. In the initial solution that consisted of all the 15 selected observed measures, only four factors had eigenvalues greater than 1. After a Promax rotation, these four factors were retained although the 4<sup>th</sup> Factor had an eigen value less than 1. This is because decisions about retention of factors is usually assessed and made during the initial extraction unless after extraction the additional factor does not add anything to the amount of total variance explained in the model (Warner, 2008). Factor 1 accounted for 19.6% of the variance, Factor 2 accounted for 11.5%, Factors 3 accounted for 9.5% and Factors 4 accounted for 6.0% of the variance in the model. Together, these four factors accounted for 46.6% of total variance explained in the model (See table 4).

An assessment of the communality table showed that the variance in some variables could be predicted fairly well from other variables in the model; while for other variables, prediction was very poor (table not shown). For instance, scores for average parental monitoring had the highest prediction from the other set of variables of .636 or 64% (for residential dad) and .584 (for residential mom), followed closely by the two variables that measured average parental support, .508 and .575 for residential mom and dad respectively. In contrast, variance in scores for dummy coded variables 1<sup>st</sup> person a respondent turns to when faced with a relationship or

school/employment/training or financial problem were low with values of .142, .257 and .244, respectively. Also low in the least amount of prediction from the other variables in the model were the transformed log base 10 income variable and the home enriching environment index with values of .181 or 18.1% and .180 or 18%, respectively. Prediction of scores in the rest of the variables in the model ranged between 30 and 40%. In total, assessment of the communality values, as seen in the bivariate correlation analysis, indicates that the variables chosen for this analysis may be weakly related with each other. Even so, the KMO and Bartlett's Test of Sphericity both indicated that the set of selected measures was at least adequate for an EFA.

Rotated factor loadings (see table 2.4) were examined to assess the nature of the four Promax retained factors. To simplify interpretation, during the Promax rotation, loadings were sorted by the size of the coefficient. The four items that had a high loading on the first Factor included parental monitoring by residential parents (*AveDadMont* - .82 and *AveMommont* - .75) and supportive relationship by residential parents (*AveSupportResDad*, *AveSupportResMom*), which had loadings of .71 and .67, respectively. Since these items suggest some form of parental participation in the youth's life, this first factor could be labeled as "Parental Involvement." The four items that loaded high on the second factor were, highest grade completed by residential dad (.80), residential mom (.76), the home enrichment environment index (.45), and average gross income (.44). This set of items represents some aspect of the economic background of the natal family. Therefore, this second factor could be labeled as "Social Economic Status". The three items that loaded high on the third factor were indicators of the number of people a respondent could turn to when faced with a school, employment or training problem (*NumSchEmpTrn* - .80), financial problem (*NumFinance*- .69), and a relationship problem (*NumRelationship*- .65). All these variables are related to the array of social support that a respondent could tap into for

assistance with a personal problem. To be more specific about the nature of social support based on the indicators used, this third factor, therefore, could be labeled as “Social Network.” The three items used as indicators of the 1<sup>st</sup> person the youth could turn to when faced with the three personal problems above all loaded high onto the fourth factor. Since these items were dummy coded to assess parental figures versus everyone else in the respondent’s pool of connection, this fourth factor could, simply, be labeled as “Closeness to Parental Figures.” Last, an examination of the structure matrix table to assess factorial complexity – whether items loaded high on more than one factor – suggested that all except one of the items had low loadings (less than .30) in other factors. Put another way, items used in the EFA model did not to cross-load onto the factors.

Finally, to assess construct validity of items in the four retained factors, an internal consistency for items in each of the factors was examined using Cronbach’s alpha. All except one alpha were moderate and in acceptable range – .80 for Factor 1 “Parental Involvement” (4 items), .62 for Factor 2 “Social Economic Status” (5 items), .78 for Factor 3 “Social Networks” (3 items), and .59 for Factor 4 “Closeness to Parental Figures” (3 items). The low internal consistency with items in Factor 4 “Closeness to Parental Figures” could be due to the dummy coded nature of items that constitute the factor. More work is needed to address these measurement issues. For the two factors with low Cronbach’s alpha values, no substantial increase in alpha was achieved by eliminating any items.

### **Discussion**

Research that examines intergenerational social mobility would benefit from also incorporating a more comprehensive measure of family resources and processes that depict a variety of ways in which family background influences transitions to adulthood for young

people. This comprehensive measure should not only be theoretically sound in conceptualization, it should also have empirical applicability. This study's main objective was to begin filling this gap by revisiting Bourdieu's framework to identify the underlying structural factors that constitute the key dimensions of the family capital construct. Through an examination of the structural factors underlying this theoretical concept based on 15 selected measures of family resources and processes, a four factor model was revealed as underlying the family capital construct. The first factor consisted of items that represented measures of "family involvement", the second factor consisted of measures of "socioeconomic status", the third factor consisted of measures of social network," and the fourth factor consisted of measures representing a respondent's "closeness to parental figures." These findings constitute both a new and an old story. The four factor model is a new finding that perhaps could contribute to the literature by expanding Bourdieu's conceptualization of family capital, the factors themselves are familiar findings consistent with prior research (Duncan & Magnuson, 2005; Fingerman et al., 2012; Guldi, Page & Stevens, 2007; Hartinger-Saunders et al., 2012; Johnson et al., 2011; Keister, 2005; Lareau, 2000; 2003, Lareau & Weininger, 2008; Mazmuder, 2005; Schoeni & Ross, 2005).

Although Bourdieu (1986) did make a significant contribution to our understanding of different forms of family capital that are used in the reproduction of social class status, his conceptualization of family capital has largely remained theoretical with only limited or partial application in empirical research, particularly with use of secondary data. In fact, to my knowledge, there has not been any published work that has attempted to empirically test Bourdieu's conceptualization of the concept of family capital as consisting of three distinct dimensions that are economic, social and cultural with secondary data. There is, however, a

sizable amount of discussion about the three forms of capital in the literature (Boterro & Crossley, 2011; Fingerman et al., 2012; Grenfell, 2005; Hartinger-Saunders et al., 2012; Johnson et al., 2011; Lamont & Lareau, 1988; Lareau & Weininger, 2008; Weininger, 2005). Some discussions revolve around the debate of whether the three forms of capital really exist in the three distinct forms (Grenfell, 2005). Other discussions focus on the difficulty of operationalizing these forms of capital because a large number of items could be used as indicators (Boterro & Crossley, 2011). For example, indicators of social capital could be parental expectations, parental support, frequency of communications, social networks including trust and obligations. Therefore, it becomes difficult to develop a universal measure that is all encompassing. Still other discussions focus on the difficulty of distinguishing some of these forms of capital, particularly social and cultural capital (Grenfell, 2005; Lamont & Lareau, 1988; Weininger, 2005). In other words, there is a lot of confusion and ambiguity about what family capital is, what it entails and how to empirically apply it

Perhaps this study's findings will begin addressing some of the murkiness surrounding this concept by adding some clarity to the dialogue. For instance, while in theory it may be easy to envision the three forms of capital in purely distinct forms, it may be more beneficial during empirical work to focus on examining and understanding their underlying structure. This is largely because the three forms of capital do not exist as pure dimensions. They could take up a variety of dimensions depending on the selected indicators used by a researcher. For the present study, the selected indicators resulted in a latent family capital construct with four distinct dimensions (structural factors). The task then would be a shift from trying to utilize Bourdieu's framework haphazardly towards understanding and examining the empirical meaning of the latent construct and its usefulness in examining a variety of social issues.

Another finding that could be empirically beneficial to researchers revolves around understanding what constitutes the underlying structural factors. For instance, this study's findings suggest that to be beholden to three terms that Bourdieu used (economic, social and cultural capital) and attempting to identify specific indicators associated with the three forms might be less fruitful in understanding the full spectrum of family capital. For example, parental educational achievement and fostering an environment that facilitates development of a variety of skills and talents have been previously associated with cultural capital, and as symbols of "high class culture" (Bourdieu, 1986; Lareau, 2000: 2003; Lamont & Lareau, 1988; Lareau & Weininger, 2008). However, in our analysis, and consistent with other research not utilizing Bourdieu's framework, these indicators are more associated with other indicators of socioeconomic status such as income and net-worth, and could be fruitfully utilized as such. Furthermore, understanding the underlying structure of the family capital construct might help researchers move beyond what families possess, the "capital," to also look at parental behaviors as part and parcel of the family capital concept, as Annette Lareau (2000; 2003; 2008) has appropriately argued.

The underlying four factors that emerged from the exploratory factor analysis are consistent with previous research (Fingerman et al., 2012; Hartinger-Saunders et al., 2012; Johnson et al., 2011; Lareau, 2000: 2003; Lareau & Weininger, 2008). It was interesting to see that for the first factor "Parental Involvement," the two pairs of selected indicators (support and monitoring by residential parents) that loaded heavily onto the first factor were in conceptualization associated with two different forms of capital – social and cultural capital, respectively. However, our factor analysis revealed that this set of indicators, which in retrospect, speak more of parental behavior than resources possessed, are highly correlated and

together provide a unique dimension of the latent construct – family capital. Also, interesting was the observation that, together, they were the main drivers of variance in the model accounting for approximately 20% of total variance explained. This finding collaborates well with how “Parental Involvement” is conceptualized and operationalized in previous research. For many scholars “parental involvement” is generally viewed as the extent to which parents actively participate in their children’s lives (the support part) as well as the degree to which parents are knowledgeable about their youth, activities that their youth engage in as well as their whereabouts (Fingerman et al., 2012; Hartinger-Saunders et al., 2012; Johnson et al., 2011; Lareau & Weininger, 2008). These two sets of indicators are often used together, particularly while examining the parenting style approach proposed by Annette Lareau (2000; 2003), referred to *Concerted Cultivation*. “Parental Involvement” has been significantly associated with a variety of young adults outcomes such as reduction in crime involvement (Johnson et al, 2011), educational achievement (Lareau & Weininger, 2008) as well as improved well-being (clear sense of defined goals and life satisfaction) of young adults (Hartinger-Saunders et al., 2012). In subsequent analysis, this factor will be employed to assess its effect on young adults’ outcomes in areas such as educational attainment.

The second factor labeled “Social Economic Status” (SES) is also consistent with existing literature (Duncan & Magnuson, 2005; Keister, 2005; Guldi, Page & Stevens, 2007; Mazmuder, 2005; Schoeni & Ross, 2005). What is astounding, however, is that although Bourdieu’s framework directs us to squarely focus on economic ingredients such as income, wealth holding and net worth to constitute economic capital, findings from this study suggest that the underlying structure of this form of capital could be made up of more items beyond the monetary elements. Proxy indicators such as parental educational achievement as well as an

enriching home environment that provides beyond the basic necessities could also be useful indicators in helping us expand our understanding of the breadth of this dimension in the latent family capital construct. Interestingly, the manner in which these indicators loaded onto the latent factor is consistent with the way scholars conceptualize and operationalize economic background in natal families (Keister, 2005; Guldi, Page & Stevens, 2007; Mazmuder, 2005). Stated differently, scholars usually focus on the full spectrum of indicators of socioeconomic status, that is, monetary elements, educational factors, occupational factors, as well as other factors such as the home environment. Surprising though, was the fact that this “social economic status” latent factor explained only 11.5% of variance in the model. In other studies, SES consisting of parental income and education including other proxies measures such as family structure account for much more of the variance explained, between 40-60% (Keister, 2005; Mazmuder, 2005).

The third factor, “Social Network,” and the fourth factor, “closeness to parental figures,” consisted of loadings that initially were assumed to represent the social capital dimension of family capital. It was also hypothesized that these indicators would load onto the same latent factor. This was because, the first set of questions *number of people a respondent would turn to with a person problem*, were assumed to measure the scope of a youth’s social connections while the second set of questions which asked, *of the number of people a respondent could turn to, who would they turn to first*, was assumed to measure closeness of ties in their social connection, particularly to parental figures. Surprisingly, these indicators did not even seem to be highly correlated with each other and consequently did not load together onto the same factor. In fact, using orthogonal rotation (Varimax), each indicator on the second set of questions loaded separately on the first three factors (results not shown). The loadings were low (less than .2),

whereas the other loadings on these factors were high - an indication that these “closeness to parental figures” items were factorially complex. Using an oblique rotation, these indicators loaded onto the fourth factor. In young adults studies, there is ample research that shows that social networks, particularly positive relations of young people with their parents and/or supportive adults, can be beneficial for a variety of outcomes such as reduced incidents of sexual and drug related risk behaviors, educational achievement, successful school to work transitions and increased attachment to full-time labor market during young adulthood (Lareau 2000; 2003, Lareau & Weininger, 2008; McDonald et al., 2007; Staff & Mortimer, 2008; Tyler, 2008). Of import here is not just the web of connections young adults have; rather it is on whether these connections can be used as resources to deal with the myriad of challenges the young person might be encountering such as in relationships, schooling, employment or financial problems.

### **Limitations**

There are several limitations, some general and others specific, to this exploratory study that are worth mentioning. Generally, it is important to acknowledge that EFA is rarely used in social sciences as it has been used in this study. In fact, some scholars would argue that use of EFA to examine phenomena is an excuse to validate a poorly conceived study and therefore many researchers avoid utilizing this statistical technique. In addition, when EFA is used, more often than not, it uses well tested measures/scales from other previous studies or researchers go through an extensive period of designing their own instruments, collecting data and then attempting to develop their measures or scale. An overarching goal in conducting this study was to demonstrate that, although the emphasis in prior research has been on model testing, perhaps more attention could be profitably paid to model generation by scholars. And, this study used Bourdieu’s framework as a starting point from which a family capital construct could then be

identified and utilized in further statistical analysis. Since Bourdieu's conceptualization has been used in a variety of ways without any concrete consensus, there is no specific measure that exists and therefore, this study selected its measures guided primarily by theory and constrained by the selected data. Another, limitation, therefore, is that the four factor model that emerged may not be reproduced if another researcher chose to employ a different set of indicators of family resources and processes on these data or another dataset. However, this four factor model should be taken as a starting point from which this model could be revised, improved and refined. In addition, although during conceptualization, this study envisioned social capital to also entail social exchanges, it did not select any indicators that represented social support that youth could be have been receiving from their parents. This was largely because when selected indicators were examined (for example advice index from parental figures), there were very few valid responses to allow their meaningful use as indicators, and so these indicators were dropped.

There are several specific limitations to this study also worth mentioning that pertain to the observations yielded from the measures employed. For one, some of the selected family processes measures had a large amount of missing values. Although, the EM method to impute missing data was used to estimate new values, such a large amount of missingness is problematic and makes the measures themselves less than ideal. Two, the indicator, *household net-worth*, had a large positive skewness (3.539). Although some transformation was attempted, it did not seem to improve the variable, and therefore, it was dropped from all other analysis. Last, when bivariate matrix scatterplots were examined some variables had less than ideal linear relationships with each other and hence calls for caution in the interpretation of our results.

## **Conclusion**

In summation, this is just an initial investigation of an attempt to build more understanding of the resources that families marshal and the family processes through which they could be transferring advantages from one generation to another. This study is far from ideal, but the hope is that it might encourage scholars not to shy away from applying Bourdieu's framework to empirical work or developing more reliable measures of family capital using secondary data. The hope is that it will generate scholarly interest as researchers attempt to improve and utilize it. Further research should be conducted to include more definitive measures of family resources and parental behaviors that facilitate positive outcomes in young adults. For instance, in this study, the identified structural model could also be useful in predicting a variety of outcomes in young adult lives. The next phase is to use this family capital construct either in multiple regression or with structural equation modeling (SEM), to examine its effects on educational achievement, and the economic well-being of young adults in the NLSY97 data.

### References:

- Anderson, P & Hansen, M. (2012). Class and Cultural Capital— the Case of Class Inequality in Educational Performance. *European Sociological Review*, 28(5), pp. 607–621.
- Bartholomew, D., Steele, F., Moustaki, I. & Galbraith, J. (2008). *Analysis of multivariate social science data*. Boca Raton: CRC Press.
- Becker, G. (1993). Nobel lecture: the economic way of looking at behavior. *Journal of Political Economy*, 101 (3), p. 385-409.
- Becker, G. (1986). The economic approach to human behavior. In Jon Elster (Ed.). *Rational choice*. Washington Square, N.Y: New York University Press.
- Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4(3), p. 1–39.
- Berlin, G., Furstenberg, F. & Waters, M. (2010). Introduction the [Special] Issue. *The Future of Children*, 20 (1), p. 3-18.
- Berzin, S. C., & De, M. A. C. (2010). Understanding the Impact of Poverty on Critical Events in Emerging Adulthood. *Youth & Society*, 42, (2), p. 278- 300.
- Blank, R. M. (2011). *Changing inequality*. Berkeley: University of California Press
- Blau, P. M., & Duncan, O. D. (1967). *The American occupational structure*. New York: Wiley
- Bodovski, K. & Farkas, G. (2008). Concerted cultivation” and unequal achievement in elementary school. *Social Science Research*, 37 (3) p. 903–919.
- Botero, W. & Crossley, N. (2011). Worlds, Fields and Networks: Becker, Bourdieu and the Structures of Social Relations. *Cultural Sociology*, 5(1), pp. 99-119.
- Bourdieu, P. (1986). The Forms of Capital. In John Richardson (ed.). *Handbook of theory and research for the sociology of education*. New York: Greenwood Press, p. 241-258.
- Bowles, S., Gintis, H., & Osborne, G. M. (2005). *Unequal chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- Brente-Tinkew, J., Scott, M. & Llja, E. (2010). Single Custodial Fathers’ Involvement and Parenting: Implications for Outcomes in Emerging Adulthood. *Journal of Marriage and Family*, 72, p. 1107-1127.
- Business Week (November, 14, 2005). Thirty and Broke. The real price of a college education today. *Business Week Special Report*. Retrieved May 9<sup>th</sup> 2009 from [http://www.businessweek.com/magazine/content/05\\_46/b3959107.htm](http://www.businessweek.com/magazine/content/05_46/b3959107.htm)

- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, N.J: Lawrence Erlbaum Associates.
- College Board. (2013). Trends in College Pricing 2013. *Trends in Higher Education Series*. Found at <http://trends.collegeboard.org/sites/default/files/college-pricing-2013-full-report.pdf>
- College Board (2008). Trends in College Pricing 2008. Trends in Higher Educational Series. Found at <https://professionals.collegeboard.com/profdownload/trends-in-college-pricing-2008.pdf>
- Conley, D. (2001). Capital for College: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59-72.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Danziger, S. & Ratner, D. (2010). Labor market outcomes and the transition to adulthood. *The Future of Children*, 20 (1), p. 133-158.
- Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley: University of California Press.
- Elder, G. (1998). The life course of development theory. *Child Development*, 69 (1) 1-12
- Esping-Andersen, G. (January 01, 2004). Untying the Gordian knot of Social Inheritance. *Research in Social Stratification and Mobility*, 21, p. 115-138.
- Fingerman, K., Cheng, Y., Wesselmann, E., Zarit, S., Furstenberg, F. & Birditt, K. (2012). Helicopter Parents and Landing Pad Kids: Intense Parental Support of Grown Children. *Journal of Marriage and Family*, 74, p. 880-896.
- Fischer, C. S., & Hout, M. (2006). *Century of difference: How America changed in the last one hundred years*. New York: Russell Sage Foundation.
- Furstenberg, F. (2010). On a New Schedule: Transitions to Adulthood and Family Change. *The Future of Children*, 20 (1), p. 67-87.

- Furstenberg, F. (2008). The intersection of social class and the transition to adulthood. *New Directions in Child and Adolescent Development*, 119(spring), p. 1-10.
- Furstenberg, F. (2006). Diverging development: The not-so-invisible hand of social class in the United States. *Network on Transition to Adulthood Research Network Working Paper*, March 23-26, 2006.
- Greg, D. & Magnuson, K. (2005). Can Family Socioeconomic Resources Account for Racial and Ethnic Test Score Gaps? *The Future of Children*, 15(1), pp. 35-54.
- Grenfell, M. (2005). *Pierre Bourdieu: Agent Provocateur*. London: Continuum.
- Guldi, M., Page, M. and Stevens, A. (2007). Family background and children's transitions to adulthood over time. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Hartering-Saunders, R., Rine, C., Wieczorek, W. & Nochajski, T. (2012). Family level predictors of victimization and offending among young men: Rethinking the role of parents in prevention and interventions models. *Children and Youth Services Review*, 34, pp. 2423–2432.
- Hoyle, R. H. (2012). *Handbook of structural equation modeling*. New York: Guilford Press.
- Jaeger, M. (2009). Equal Access but Unequal Outcomes: Cultural Capital and Educational Choice in a Meritocratic Society. *Social Forces*, 87(4), pp. 1943-1971.
- Johnson, W., Giordano, P., Manning, W. & Longmore, M. (2011). Parent–Child Relations and Offending During Young Adulthood. *Journal of Youth Adolescence* 40, pp. 786–799.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Lamont, M. & Lareau, A. (1988). Cultural Capital: Allusions, Gaps and Glissandos in Recent Theoretical Developments. *Sociological Theory*, 6 (2), p. 153-168.
- Lareau, A. (2003). *Unequal childhoods: Class race and family life*. Los Angeles: University of California Press.
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education*. Lanham, MD: Rowman & Littlefield Publisher.
- Lareau, A. (1987). Social Class Differences in Family-School Relationships: The Importance of Cultural Capital. *Sociology of Education*, 60(2), pp. 73-85.

- Lareau, A., & Conley, D. (2008). *Social class: How does it work?* New York: Russell Sage Foundation.
- Lareau, A and Weininger, E. (2008). Class and the Transition to Adulthood. In A. Lareau and D. Conley. *Social class: How does it work?* New York: Russell Sage Foundation.
- Lareau, A., & Weininger, E. B. (2003). Cultural capital in educational research: A critical assessment. *Theory and Society*, 32, (5-6) p. 567-606.
- Laser, J. & Leibowitz, G. (2009). Development: Utilizing Social Capital Theory. *Journal of Sociology & Social Welfare*, 36 (1), p. 87-102.
- Linneman, T. J. (2011). *Social statistics: The basics and beyond*. New York: Routledge.
- Mazumder, B. (2005). The Apple Does Not Fall Far from the Tree: New and revised estimates of the intergenerational inheritance in earning. In S. Bowles, H. Gintis & O. Groves (Eds.). *Unequal Chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- National Center for Education Statistics (NCES) (2013). U.S. Department of Education, National Center for Education Statistics. (2013). *Digest of Education Statistics, 2012* (NCES 2014-015), Chapter 3.
- Osgood, W., Foster, M. & Courtney, M. (2010). Vulnerable populations and the transition to adulthood. *The Future of Children*, 20 (1), p. 209-229.
- Osgood, W., Foster, M., Flanagan, C. & Ruth, G. (2005). *On your own without a net: The transition to adulthood for vulnerable populations*. Chicago: University of Chicago Press.
- Page, B. I., & Jacobs, L. R. (2009). *Class war? What Americans really think about economic inequality*. Chicago: University of Chicago Press.
- Powell, B., Steelman, L. & Carini, R. (2006) Advancing Age, Advantaged Youth: Parental Age and the Transmission of Resources to Children. *Social Forces*, Vol. 84, (3), pp. 1359-1390.
- Roska, J. & Potter, D. (2011). Parenting and Academic Achievement: Intergenerational Transmission of Educational Advantage. *Sociology of Education*, 84(4), pp. 299–321.
- Rumberger, R (2010). Education and the reproduction of economic inequality in the United States: An empirical investigation. *Economics of Education Review*, 29 (2), p. 246–254.
- Sanderfur, G., Meier, A. & Campbell, M. (2006). Family resources, social capital, and college attendance. *Social Science Research*, 35 (2) p. 525-553.

- Schoeni, R. & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (July 01, 2006). Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review. *Journal of Educational Research*, 99, 6, 323-337
- Settersten, R. A., & Ray, B. (2010). *Not quite adults: Why 20-somethings are choosing a slower path to adulthood, and why it's good for everyone*. New York: Bantam Books Trade Paperbacks.
- Settersten, R. and Ray, B. (2010b). What's going on with Young People Today? The Long and Twisting Path to Adulthood. *The Future of Children*, 20 (1), p. 19-41.
- Staff, J., & Mortimer, J. T. (2008). Social class background and the school-to-work transition. *New Directions for Child & Adolescent Development*, 2008, (119), p. 55-59.
- Swartz, T. T. (2008). Family capital and the invisible transfer of privilege: Intergenerational support and social class in early adulthood. *New Directions in Child and Adolescent Development*, 119(spring), p. 11-24.
- Swartz, D. (2007b) Bringing Bourdieu's Master Concepts into Organizational Analysis. *Theory and Society*, 37 (1), pp. 45-52.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson and Allyn & Bacon.
- Weininger, E. (2005). Foundations of Pierre Bourdieu's class analysis. In E. O. Wright (Ed.). *Approaches to class analysis*. Cambridge, UK: Cambridge University Press.
- Whightman, P. & Danziger, S. (2011). Poverty, Intergenerational Mobility and Young adult Education Attainment. *Research Network Working Paper (June)*, Network on Transitions to Adulthood.

Table 2.1. Measures of the multidimensional Family Capital Construct

Construct	Indicators	Level of Measurement
<b>Economic Capital</b>		
	AveGrossInc 1997-2003	Ratio Scale
	AveHHNetworth 1997-2003	
<b>Social Capital</b>		
	Number of people to turn to for advice (2003)	
	Relationship (YDOM-300)	Ratio Scale
	School/Employment/Training (YDOM-700)	
	Finances (YDOM-1100)	
	Who R Turns to First with above Personal Problems	Dummy Coded
	Relationship (DimmyRel)	( 0=everyone else and 1= Parental Figures)
	School/Employment/Training (DimmySchEmpTrn)	
	Finances (DimmyFinance)	
	Average Support Scale of Relationship with Residential Mother (AveSupportResMom)	Scale: Score range 0 to 32 with higher indicating a more supportive relationship
	Average Support Scale of Relationship with Residential Father (AveSupportResDad)	
<b>Cultural Capital</b>		
	CV_HGC_RES_DAD 1997 (Residential Dad Highest Grade Completed)	Ordinal Scale (0=none to 20= 8 year college or more)
	CV_HGC_RES_Mom 1997 (Residential Dad Highest Grade Completed)	
	AveMomMont (Average 1997-2000 of Residential Mom Monitoring)	Scale with scores 0-16 (Higher scores indicate greater parental monitoring)
	AveDadMont (Average 1997-2000 of Residential Dad Monitoring)	
	Enriching Environment Risk Index 1997 (presence of a computer, dictionary or taking extra classes such as music, dance, foreign language)	Index with scores 0-3 (Higher scores indicate more enriching)

**Table 2.2: Sample demographics and Sample Description (N=4707)**

<b>Variable</b>	<b>Categories</b>	<b>Frequency</b>	<b>(SD/%)</b>
Age Mean (SD)		27.05	(0.8)
Age Range		25.75 - 28.58	
Sex	Male	2423	51.5
	Female	2284	48.5
Race/Ethnicity			
	Blacks	1215	25.8
	Hispanic	993	21.1
	Whites	2499	53.1
<b>Primary indicators</b>			
NewGrossInc		4.51	0.56
		0 - 5.48	
NumHelpRelationship		4.83	3.31
Range		0 - 13	
NumHelpFinance		2.8	2.61
Range		0 - 13	
NumHelpSchEmpTrn		4.73	3.66
Range		0 - 13	
DmmyRel	Parental figures	1589	42.30
DmmyFinance	""	1925	72.00
DmmySchEmpTrn	""	2114	61.20
Average Support ResMom (97-99)		24.6056	4.22
Range		4 - 32	
Average SupportResDad (97-99)		23.9029	5.20
Range		0 - 32	
CV_HGC_RES_DAD 1997		12.64	3.50
Range		0 - 20	
CV_HGC_RES_MOM 1997		12.56	3.33
Range		0 - 20	
ENRICHING ENV 1997		1.74	0.77
Range		0 - 3	
AveMomMont		9.86	2.71
Range		0 - 16	
AveDadMont		7.54	3.45
Range		0 - 16	

Table 2.3: Correlations for observed indicators of economic, social and cultural capital (n=4707)

	NewGrossInc	AveMomMont	AveDadMont	AveSuppoResMom	AveSuppoResDad	NumHelpRelationship	NumHelpSchEmpTrn	NumHelpFinance	CV_HGC_RES_DAD 1997	CV_HGC_RES_MOM 1997	ENRICHING ENVIRONMENT RISK INDEX 1997	DmmyRel Relationship	DmmyFinance	DmmySchEmpTrn
NewGrossInc	1													
AveMomMont	.064**	1												
AveDadMont	.084**	.650**	1											
AveSupportResMom	.098**	.544**	.382**	1										
AveSupportResDad	.133**	.395**	.628**	.566**	1									
NumHelpRelationship	.177**	.147**	.174**	.156**	.194**	1								
NumHelpSchEmpTrn	.155**	.122**	.115**	.135**	.163**	.579**	1							
NumHelpFinance	.088**	.115**	.143**	.139**	.173**	.499**	.589**	1						
CV_HGC_RES_DAD 1997	.286**	.079**	.099**	.111**	.134**	.187**	.162**	.124**	1					
CV_HGC_RES_MOM 1997	.293**	.072**	.062**	.101**	.082**	.171**	.181**	.154**	.647**	1				
ENRICHING ENVIRONMENT RISK INDEX 1997	.254**	.110**	.131**	.105**	.170**	.188**	.187**	.142**	.369**	.318**	1			
DmmyRel Relationship	-.074**	.154**	.116**	.155**	.074**	-.027	-.059**	-.007	-.049**	-.034*	-.066**	1		
DmmyFinance	.180**	.125**	.141**	.139**	.159**	.058**	.017	-.025	.150**	.142**	.112**	.238**	1	
DmmySchEmpTrn	.130**	.147**	.162**	.163**	.157**	.066**	-.008	.059**	.128**	.119**	.091**	.276**	.449**	1

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

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 2.4. Principal Axis Factor Analysis of the Family Capital Construct with Promax Rotation**

	Factor Loadings			
	1	2	3	4
<i>Cronback alpha</i>	0.796	0.620	0.782	0.585
AveDadMont	.818			
AveMomMont	.747			
Average Support ResDad (97-99)	.713			
Average Support Residential Mom (97-99)	.670			
CV_HGC_RES_DAD 1997		.799		
CV_HGC_RES_MOM 1997		.763		
ENRICHING Home ENV 1997		.446		
NewGrossInc		.437		
NumHelpSchEmpTrn			.803	
NumHelpFinance			.689	
NumHelpRelationship			.649	
DmmySchEmpTrn				.712
DmmyFinance				.610
DmmyRel				.419
Eigenvalue	2.745	1.608	1.335	.817
Percent of variance explained	19.604	11.483	9.537	5.834
Cumulative percent of variance explained	19.604	31.087	40.624	46.458

CHAPTER 3: THE RELATIVE EFFECTS OF DIFFERENT FORMS OF FAMILY CAPITAL ON YOUNG ADULTS'  
EDUCATIONAL ATTAINMENT

**Introduction**

Economic Inequality in America has grown over the last 4 decades (Blank, 2011; Greenstone et al., 2013; Page & Jacobs, 2009). It is not just in matters economic where scholars observe troubling levels of disparities, existing research suggests that American society is experiencing increased levels of inequalities in virtually every aspect of American life, from wealth, to incomes, to educational attainment, to health care, and even job security (Blank, 2011; Page & Jacobs, 2009; Rumberger, 2010). The concerning implication of this trend is that increasing economic inequality could result in increasing inequality of opportunity and upward mobility between generations. It is important to acknowledge that inequality has always existed in American society, and its effects in determining people's destinies have been well documented. However, due to various forces including entrepreneurship, innovation as well as the impact of public policies, Americans have experienced economic mobility between generations, such that one was not always stuck in the social position in which they were born. For example, the American education system was seen as a powerful public policy tool that enabled people to overcome disadvantages due to their socioeconomic backgrounds. Furthermore, the education system was largely seen as a ladder to upward mobility and one of the principal determinants of individuals' life outcomes, particularly in the labor market (Blau & Duncan, 1967; Becker, 1986; Danzinger & Rouse, 2007). Even so, a well-established body of research also shows that the American educational system is actually a great divider and a powerful mechanism in the reproduction of social class status (Fischer & Hout, 2006; Ornstein, 2007; Whitman & Danzinger, 2011). This is because an individual's education not only

determines where and how one works and how much one gets paid, but it is also increasingly influencing other aspects of an individual's life such as where one lives, who one marries and how stable the marriages are. (Fischer & Hout, 2006).

For a young person coming of age today, research suggests that advanced education and skills training have become a necessity to the attainment of jobs with sufficient income to support independent living or meet the basic needs of a household (Aronson, 2008; Danziger & Rouse, 2007; Danziger, & Ratner, 2007; Furstenberg, 2006; 2008; Staff & Mortimer, 2008; Stettersten & Ray, 2010; 2010b). Interestingly, it is not only scholars who seem to be cognizant of the impact advanced education has in determining young people's fates and fortune; the parents of the current cohort of young adults appear equally aware, and this has resulted in a fundamental shift in their parenting practices towards contemporary young adults. Parents are not just focused in nurturing the development of their children by providing basic necessities and socializing their children to be responsible adults and good citizens. Contemporary parents are becoming more proactive in nurturing the development of their children through more intentional socialization and creation of opportunities and experiences that enabled their children to not just do well but to also know how to navigate social systems and institutions to their advantage.

For example, instead of just sending their children to college, some parents get actively involved in the courses their children enroll in, the extracurricular activities their children engage in, including who their children share the dormitory with as well as their children's relationship with instructors and college officials (Levine & Dean, 2012; Lareau & Weininger, 2008). Also, research in this field suggests that these parenting strategies seem to markedly differ between poor/low-income families and affluent (middle-class/upper-middle class and rich) families (Lareau, 2000; 2003; Lareau & Weininger, 2008; Staff & Mortimer, 2008; Stettersten & Ray,

2010). In addition, affluent parents are able to send their children to private elementary, middle, high school or even college. Others are able to live in good neighborhoods where their children will attend better resourced public schools. Also, affluent parents are more likely to invest in extra tutoring and extracurricular activities so that their children will be able to attend colleges with scholarships and/or grants, while others are able to pay for the full cost of their children's education, particularly in post-secondary schooling which enables their offspring to complete school without assuming burdensome educational debt.

Some scholars note that, due to this change in parenting practices, disparities in academic performance between children from high and low-income families, even when minimal at the beginning of schooling age, begin to grow with schooling and increase and then persist into high school (adolescence) and college (young adulthood) (Rouse & Barrow, 2006; Furstenberg, 2006; 2008; 2010; Greenstone, et al., 2013; Reardon, 2011; Whitman & Danzinger, 2011).

Furthermore, for contemporary cohort of young adults, economic inequality during the educational attainment process is characterized by differences in college enrollments, college persistence and college graduation rates as well as successful college-to-labor market transitions. Consequently, the current educational attainment process in the American society is increasingly seen to be stratified by families' economic positions due to economic inequalities (Esping-Anderson, 2004; Ornstein, 2007).

There is a large body of research that has examined how family background influences educational achievement of children from these families (Barrow and Schanzenbach, 2012; Berzin & De Marco, 2010; Bowles, Gintis & Osborne, 2005; Conley, 2001; Duncan & Brooks-Gunn, 1997; Greenstone et al., 2013; Lareau & Weininger, 2008; Ornstein, 2007; Reardon, 2011; Rouse & Barrow, 2006; Staff & Mortimer, 2008; Swartz, 2008; Whitman & Danzinger, 2011).

For instance, a study by Whightman & Danziger (2011) found that the gap in college completion has remained unchanged (and even increased) over the past 30 years between young adults (aged 25) from low- and high-income families as well as between those whose parents have low and high educational attainment. Specifically, for young adults from low-income families, predicted college completion rates fell from 5% to 3 % while their counterparts from high-income families increased from 30% to 57%. Likewise, for young adults whose parents did not have any college experience, their predicted college completion rates fell from 8% to 6% while those of their counterparts, with at least one-parent who is a college graduate, increased from 37% to 57% over the three decades.

The problem, though, is that prior research usually utilizes measures that only capture partial aspects of a family's social and economic background. For instance, a family's social and economic status (SES) is a widely used measure and (as noted above) a well-established body of evidence shows that it has a causal effect on the educational outcomes of children, youth and young adults. However, most studies do not go beyond SES, which, while crucial to educational attainment, is an incomplete measure of family capital, in seeking to understand the parenting practices that contemporary parents utilize to influence their young adults educational attainment. To be sure, there is research that has attempted to examine parental practices and the mechanisms through which these practices influence young adults' achievement including educational attainment (Guldi, Page & Stevens, 2007; Lareau 2000; 2003; Lareau & Weininger, 2008; Schoeni & Ross, 2005; Swartz, 2008). While this approach has allowed researchers to understand the mechanisms through which advantage is transmitted from parents to their progeny, it has only provided a limited accounting of the resources that natal families invest in

their children, although the evidence is clear that there are differences in parenting practices and strategies between affluent and poor/low-income families.

Perhaps a more promising avenue to comprehensively capture the influence of family background is to carefully examine the underlying structure of the kinds of resources and family processes that contemporary families employ to influence the educational attainment process of their transitioning young adults. Therefore, situating this study in Pierre Bourdieu's (1986; 1984) theoretical understanding of family background measures, which encompasses a multidimensional configuration of family resources and processes that can be economic, social and cultural (henceforth referred to as Family Capital), this paper seeks to examine how the distinct dimensions of family capital, when estimated using select measures of family resources and processes, can be used to predict the educational attainment of a national representative sample of young adults.

Briefly, Bourdieu (1986) proposed a family capital perspective that has a multidimensional configuration entailing economic, social and cultural components of family resources and processes. The economic component was assumed to constitute material and financial wealth. The social component he argued to be the aggregate of actual or potential resources derived from an individual's network of formal and informal relationships. He envisioned cultural capital to be the habits, attitudes and preferences that children are socialized into that can be used as resources to negotiate a variety of social systems and context (Bourdieu, 1986). Bourdieu further argued that this multidimensional family capital framework could be seen as a model with three orthogonal axes (Bourdieu, 1986; Weininger, 2005). The first axis constitutes of the *total volume* of capital (economic, social or cultural). The second axis constitutes the *composition* of capital possessed. That is, does a family possess lot of capital in

the three dimensions versus a lot of economic capital but little social or cultural capital or vice versa? The third axis constitutes the *stability or change* (over time) of both the volume and composition of capital a family enjoys. Bourdieu's framework has extensive use in the literature but has also attracted a lot of criticisms including the methodological difficulties of measuring the different dimensions of capital using existing data. The limited accounting of the multidimensional family capital characteristics is in large part influenced by what researchers can do with available data and the desire to use parsimonious models in data analysis (Bartholomew et al., 2008, Tabachnick & Fidell, 2007). However, the use of latent constructs in analyzing data could allow scholars to overcome this challenge.

This study, therefore, builds upon a previous study (Dissertation paper 1), that explored the structure of a latent family capital construct when estimated using distinct family background resources and processes measures that are economic, social, and cultural. To be specific, the previous paper used an exploratory factor analysis (EFA) to examine the underlying structure of 14 select indicators based on the work of Pierre Bourdieu (1986; 1984) on forms of family capital and Annette Lareau's (2000; 2003) work on family processes. The EFA revealed a four factor model and further analysis to assess the internal consistency of items that made up each of the factors revealed that the 4 factor model was reliable. Cronbach's alpha values ranged from marginally acceptable (.59) to good (.80). The 1<sup>st</sup> Factor appeared to capture aspects of Parental Involvement, the 2<sup>nd</sup> Factor appeared to capture Social Economic Status (SES), the 3<sup>rd</sup> Factor appeared to capture respondents' Social Networks and the 4<sup>th</sup> Factor appeared to capture Closeness to Parental Figures. The previous paper aimed at examining whether these are distinct dimensions of family capital when estimated using select measures of the family background that are economic, social and cultural. This paper builds upon that work by examining the influence

of family capital (and its different dimensions) on educational outcomes of young adults. Specifically, this paper examines the direct and indirect effects of the latent family capital construct on the educational achievement of a contemporary cohort of young adults, while also accounting for select demographic characteristics and milestones associated with adulthood.

This paper proceeds as follows: First, it begins with a brief review of prior research on educational attainment of young adults focusing on the influence of family background and other confounding factors, including the research questions to be addressed by this investigation. Second, a discussion of the data and methods used in this study is presented. Third, the paper presents the results of the analysis. Fourth, the paper ends with a discussion of the findings and implications for social welfare research and practice.

### **Research on Young Adults' Educational Attainment and Family Background**

Although the research on how family background impacts the educational achievement of children, adolescents and young adults is extensive and beyond the scope of this paper to summarize, there are some key themes and general findings that inform this research. One, due to the changing macroeconomic environment and a protracted transition to adulthood process, most young people now are getting postsecondary education and training either in a four-year or two-year college before joining the full-time labor market (Berlin, Furstenberg & Waters, 2010; Danzinger & Ratner, 2010; Danzinger & Rouse, 2007; Furstenberg, 2010; Settersten & Ray, 2010; 2010b). Two, research shows that college enrollment is at an all-time high and has been increasing over the past few decades. For example, about 42% of young adults (18-24 years) enrolled in college in 2011 compared to only 36% of them in 2001. Also, estimates suggest that between 2001 and 2011, college enrollments in degree granting institutions increased by 32% (from 15.9 to 21 million) compared to an 11% increase in the previous decade (1991 and 2001)

(NCES, 2013). Although most young people are going for some postsecondary education training, college graduation is relatively low and has not changed much since the 80s (College Board, 2008; 2013; Greenstone, et al., 2013; Settersten & Rays, 2010). Some estimates suggest that only about  $\frac{1}{4}$  of young adults between ages 25-34 have a bachelor's degree and those with graduate degrees make up about 5% (Settersten & Rays, 2010). What is more, the above rates have held steady for several decades now (Settersten & Rays, 2010). Other evidence also shows that only 40% of those who enrolled in a 4-year college earn their degrees in 6 years. Additionally, on time graduation for low-income and minority students is especially low (Dweyer, Hobson & McCloud, 2013; Ornstein, 2007; Zhan, 2013).

Three, educational achievement is stratified by class and parental resources affect all aspects of higher educational attainment: college preparation, college enrollment, college experience and performance as well as college graduation (Barrow & Schanzenbach, 2012; Ornstein, 2007; Powell, Steelman & Carini, 2006; Reardon, 2011; Rouse & Barrow, 2006; Rumberger, 2010; Staff & Mortimer, 2008; Whitman & Danzinger, 2011). For instance, some scholars argue that children from poor and low-income families come to the education system with fewer cognitive skills and less social capital. These differences do not disappear but rather widen as the children move through primary and secondary schools and are then magnified once the children of different class statuses attend college. In contrast, children from affluent families attend better resourced schools that prepare them for college. Should the young person flounder, affluent parents are able to hire tutors and counselors. In addition, they are able to work the higher education system through alumni associations, professional networks, and social contacts. As a result, gaps exist in college completion between young people from poor and affluent families. For example, nearly 4 out of 10 young adults from highly educated parents complete a

4 year college degree in a timely manner. In contrast, only 1 in 10 of young adults with parents without a college education manages to do so (Settersten & Ray, 2010). Other estimates suggest that there is a 45 percentage point difference in college graduation rates between affluent and poor students – a substantial increase from what it was three decades ago at 31 percentage points (Bailey & Dynarski, 2011).

Four, educational achievement also differs by sex, race and ethnicity. Women enroll and graduate college at higher rates than males (Dweyer, Hobson & McCloud, 2013; Houle, 2014; Hout, 2012; Oreopoulos & Petronijevic, 2013; Zhan, 2013). For example, between 2001 and 2011, full-time female students enrollment increased by 56% compared to a 36% increase for males (NCES, 2013). With respect to race, of the four major race/ethnic groups Asians have the highest education achievement rates followed by Whites. Blacks and Hispanics trail with Hispanic's being the least likely group to have a college bachelor's degree (only 9%). Only 27% of Whites and 15% of blacks have a bachelor's degree (Zhan, 2013).

Five, the above differences are not just limited to educational attainment, these differences can also be observed in the achievement of other milestones traditionally associated with adulthood, namely, full-time employment, establishing independent homes, getting into long-term or marriage-like relationships, and finally having children (Arnett, 2006; Furstenberg, 2010). Some scholars who study young adulthood have also argued that the above normative patterns are not experienced by all transitioning young adults and there is great variation in the timing of young adults' role transitions as well as the sequencing patterns (Jackson & Berkowitz, 2005), with some young adults experiencing a lengthened transition to adulthood process, emerging adulthood (Arnett, 2006), while others seem to achieve the above milestones associated with adulthood at a young age and complete most milestones within a shorter

duration, accelerated adulthood (Cote, 2002; Fussel & Furstenberg, 2005; Jackson & Berkowitz, 2005; Lee, 2012). Scholars, also, note that emerging or accelerated adulthood seem to differ by class, gender, and race/ethnicity with low-income youth, women and minorities being more likely to experience an accelerated adulthood (Fussel & Furstenberg, 2005; Schoeni, Landale & Daniels, 2009; Jackson & Berkowitz, 2005; Lee, 2012). In addition, the consensus is that the timing and sequencing in the achievement of traditional milestones associated with adulthood impacts educational attainment in interesting ways. For instance, some research suggests that intensive early employment negatively impacts educational achievement (Staff & Mortimer, 2008). Ample research also suggests a strong negative impact of an accelerated parenthood status on educational attainment (Berzin & De Marco, 2010; Guldi, Page & Stevens, 2007). There is minimal work and no consensus on the impact of early transitions to marriage or marriage-like relationships as well as the establishment of independent homes on educational attainment of young adults. However, the evidence is clear that poor and low income young adults who leave home early are more likely to struggle through their transitioning years and experience poverty (Osgood et al., 2005; Osgood, Foster & Courtney, 2010).

Six, the recent emergence of education debt poses a major impediment to both the possibility and the net returns on education. There is a proliferation of publication by media pundits, advocacy groups, concerned citizens and researchers on the impact of students' loans on both achievement levels but also on the economic well-being of young adults upon college completion (*Business Week*, 2005; Draut, 2005; Draut & Silva, 2004; Fetterman & Hansen, 2006; Kamenetz, 2006; O' Shaughnessy, 2008). A lot of this attention is propelled by popular media with stories of students graduating with burdensome debt, say over \$100,000, without the prospects of securing a job with a good enough salary to pay down the debt. Other media stories

warn that, of those lucky enough to secure employment, some are experiencing an educational debt burden as they are using a higher proportion of their income to repay educational loans (Draut & Silva, 2004; Kamenetz, 2006), and further speculate that the student loans industry will be the next financial bubble. While there is truth with some of the issues relating to student loans, on close scrutiny the picture is more complicated than the popular media portends. There is consensus among scholars that the total volume of loans advanced to students is now enormous (a trillion plus U.S. dollars), but this is because many young adults are enrolling and attending colleges and using loans to finance their education. However, the actual amount of debt assumed by students on average is modest with only a small portion of students accumulating burdensome debt that the popular media likes to talk about (Chiteji, 2007; Dwyer et al., 2013; Greenstone et al., 2013; Hout, 2012; Houle, 2014; Oreopoulos & Petronijevic, 2013; Zhan, 2013). For example, Oreopoulos & Petronijevic (2013) estimate college debt as modest. Their study found that less than half of a percent of graduates from 4-year public institutions end up with debt of over \$100,000. In fact, the median debt of 4-year public college was \$7,500 (in 2009 dollars). And only students at the 9<sup>th</sup> quartile in 4-year public college had debts over \$32,000.

That said, there is growing consensus among scholars that education debt has a non-linear (or curvilinear) relationship with educational attainment (Dwyer, Hodson & McCloud, 2013; Zhan, 2013). Low levels of debts do not necessarily influence more educational achievement (particularly, graduation). As debt increases many students are able to afford college. However, research has also shown that higher amounts of educational debt also increase the chances of students dropping out without graduating (Dwyer, Hodson & McCloud, 2013; Zhan, 2013). Last, although there are gender and race differences in education debt and graduation/dropout rates,

for many young adults from disadvantaged families assuming some educational loans is the most sure way of increasing ones chances of enrolling and graduating college, hence educational loans enhance ones educational achievement.

Other factors that have been shown to be important in influencing educational achievement include family structure and sibship size. Existing evidence suggests that children from single-parent (female-headed) households generally fare worse than their counterparts in two-parent families regardless of marital status (McLanahan & Percheski, 2008; Sanderfur, Meier & Campbell, 2006). Therefore, the structure of the family of origin is important to consider because of the resource pool it affects as well as the mechanisms through which any resources are deployed. Family structure is closely related to family (sibship) size. Sibship size could affect educational achievement because siblings compete for family resources in education, extracurricular activities such as dance, music or athletics, in the opportunities that their families can afford to engage the children such as travel including the parental attention provided to each child (Becker & Tomes, 1986; Kim, 2005; Keister, 2005; Sanderfur, Meier & Campbell, 2006). Therefore, in a large family more resources are consumed as the family makes investments in each of its members. Conversely, in a smaller family, there is less resource consumption as the number of members consuming the resources is smaller. Also, in a small family more resources could be invested in each child.

In sum, in contemporary society, educational attainment has increasingly become important for the current cohort of young adults. It is significantly being influenced by a variety of factors that include family background, an individual's demographic characteristics, the timing and sequencing of milestones traditionally associated with adulthood as well as educational debt assumed to mention just a few. Also, in contemporary society, evidence

suggests that that family background is playing a crucial role with parents using their stock of resources, including their connections as well as a variety of strategies to influence their young adult's educational attainment process. Therefore, this study hypothesizes that the four dimensions of the latent family capital construct will be positively related to the educational achievement levels of young adults. To be specific, a family's social and economic status will be positively correlated with higher levels of educational achievement. Also, parental involvement and use of their social connections will positively impact the educational attainment process of the young adults. Also, closeness-to-parental figures will be positively correlated with educational achievement levels.

### **Significance and Aims of this Study**

The main contribution of this study to the literature is to expand the ways in which we study family background, specifically, moving from utilizing just a few characteristics of family background to using latent construct to capture a more comprehensive aspect of family resources and processes, herein referred to as family capital. Also, this study seeks to demonstrate how the use of this latent and multidimensional family capital concept can help shed new insights into the processes through which inequalities and/or advantage could be perpetuated between generations by examining how it contributes to educational attainment of young adults. This research could help us identify important ingredients in the stock of family capital that are salient during the educational attainment process in transitions to adulthood as well as help us come up with new interventions at the family level, institutional level and the societal level that could help halt and hopefully reserve persistence of social and economic status between generations. For instance, social welfare scholars and school social work practitioners could get a better understanding of how best to build low-income families' capacities to more effectively intervene in their

children's schooling. Furthermore, better insights into how family capital influences educational achievement could enable social workers to better advocate for more effective public policies and programs that assist young adults from low income families to not only attend college, but also be able to afford it and persist to graduation. This could be a more certain approach to decoupling or reducing the effect of family background on economic mobility of the current cohort of young adults in American society.

### **Methods**

This paper builds from paper 1 and also uses data from the National Longitudinal Survey of Youth 1997 (NLSY97). Beyond the strengths of the data identified in paper 1, the NLSY97 data was deemed appropriate for this study because it contains detailed information of young adults' educational status and attainment as well as college experiences including type of institution attended, degree pursued, enrollment status using a monthly events history calendar as well as costs and financial aid information. This study examines all data available up to the 14<sup>th</sup> Wave (2010). Ordinal Logistic Regression was used to examine the relative effects of the latent family capital construct on young adults' educational achievement, while also controlling for other factors including educational loans. This design was deemed to be most appropriate because our outcome variable of interest measures education credentials (degree achieved) by a youth in the study.

This study uses the subsample of the main sample as described in Paper 1 (N=4707). Use of a subsample was because the family processes measures used to identify the four distinct dimensions of the latent family capital construct were only administered to the younger youth cohort who were between 12 to 14 years in Wave 1. Also, since the outcome of interest is higher educational attainment, we examine data from 2003 when the youngest youth (who was age 12

in Wave 1) reached 18 years, the typical age when most youth graduate high school and enroll in college. This subsample is used in predicting educational achievement all the three models in the regression.

### **Measures:**

**Education achievement (Outcome variable):** In the literature, educational achievement for young adults is generally measured as the number of years of schooling and/or the highest level of certification acquired. This study uses the latter approach and measures educational achievement as the highest degree achieved. In the NLSY97, there are two variables that measure degree achievement. The first variable measures highest degree reported in each survey interview date per year (*CV\_Highest\_Degree\_YR*). The second variable is a created variable by the NLSY97 data archivist and measures highest degree ever reported (*CV\_Highest\_Degree\_Ever*) for all respondents regardless of whether they were interviewed in the current round - the most current information on the young adult across survey rounds. This study used the created variable, *Highest Degree Ever in 2010 (CV\_Highest\_Degree\_Ever\_EDT\_2010)*. This variable is measured on an ordinal scale with values that range from 0= none/no schooling to 6= PhD and 7=professional degrees that include Doctor of Dental Surgery (DDS), Doctor of Medicine (MD) and Juris Doctor (JD). The last two categories were collapsed into one to make a conceptually meaningful category. Therefore, values range from 0=none to 6=PhD & professional degrees (see table 3.1).

**Family capital:** As this paper builds from paper 1, the latent family capital construct is measured using the four retained factors from exploratory factors analysis (EFA). These factors are used as indicators and include, *Family Involvement*, *Social and Economic Status (SES)* of the

natal family, *Social Networks* and *Closeness to Parental Figures*. All these factors are on interval/ratio scale of measurement.

### **Confounding Factors**

Since educational achievement could be affected by many other things, two sets of control variables were selected, namely, five demographic measures and two measures of traditional milestones associated with adulthood.

**Race:** In the NLSY97, race and ethnicity is a categorical variable with four values, Black, Whites, Mixed Race and Hispanic. In the previous study (Paper 1), the mixed race category who constituted only .9% of respondents in the data were already dropped. Therefore, the *Race* variable in this study was nominal with three categories, 1=Blacks, 2=Hispanics and 3=Whites. Two dummy variables were then created with Whites as the reference group.

**Sex:** *Sex* was a dummy coded variables with values 0=Male and 1=Female.

**Age:** *Age* is a continuous variable measured in years with a range of 25 to 29 years.

**Sibling resource competition (Dependent size):** Since family resources in any family are shared among dependents within the household, I include a control, dependents size in 2003, that assesses the number of individuals within the household who could be presumed to compete for resources with our respective young adults. In this study, this does not necessary mean one's siblings. Rather, it refers to *number of children under 18 years present in the household*. Herein, *Dependents Size* is also a continuous variable with values that range from 0 to 8.

### **Adulthood Transition Milestones:**

As I discussed earlier, educational achievement of young adults could be enhanced or hampered by the timing and/or sequencing of certain traditional milestones associated with adulthood. Among the four remaining traditional milestones associated with adulthood (leaving

parental home, getting into full time employment, marriage or having children), I control for the two milestones that could potentially have an influential impact on postsecondary schooling if attained before or soon after the age of 18 years. These two important milestones include *marital* and *parenthood status* in 2003.

**Marital Status:** In the NLSY97 data, marital status is measured in two ways: One, in the traditional sense with five categories of 0=Single, 1=Married, 2=Separated, 3=Divorced and 4=Widowed. Two, marital status is also measured by examining marriage and marriage-like relationships (cohabitation). As marriage-like relationships have become more common particularly among the contemporary cohort of young adults (Arnett, 2003; 2006; McLanahan, 2008), this paper uses the second approach. A *Marital Status\_2003* variable is created by categorizing respondents into exclusive marriage and marriage-like relationships. Due to small cell frequencies, especially for the exclusive categories of separated, divorced and widowed, these categories were further collapsed into one. The *Revised Marital Status* variable has categories of 1= (separated/divorced/widowed), 2= Married, 3=Cohabiting and 4=Single (never married, not cohabiting). Dummy variables were created for each of the marriage or marriage-like relationships with the single group being used as the reference category.

**Parenthood Status:** The NLSY97 measures children born by a respondent in two ways: One, the number of biological children ever born to the respondent who reside in the household. Two, the number of biological children born but who do not reside in the household. Therefore, a *parenthood status in 2003* control was created with children ever born = 1 and no children = 0.

## **Plan of Analysis**

Data analysis started with preliminary data screening in order to clean the raw data, prepare data for analysis as well as assess univariate data for violation of assumptions. Then, bivariate data analysis was conducted to assess whether there was a relationship between the outcome variable and the independent variables and covariates as well as to address assumptions of the final analysis test including cell information and multicollinearity issues among the predictor variables. The third step involved estimating a series of Ordinal Logistic Regression models to assess the relative effects of selected measures on levels of educational achievement. I begin by estimating the relative effects of the family capital variables on levels of educational achievement (the baseline Model). The second model adds demographic controls including controlling for household dependent size. The full (third) model takes into account transition into adulthood milestone factors. SPSS (now PAWS) version 21.0 was used in this analysis.

## **Results**

Characteristics of the final sample used in this study are reported in Table 3.2. The total sample is 4707 young adults between the age 25 to 29 years with a mean age of 27.05 ( $SD = .80$ ). Of the sample 48.5% are female while the rest are male. 25.8% identified as Black, 21.1% identified as Hispanic while the rest identified as Whites (Non-Black/Non-Hispanic). A greater majority of the sample (82.4%) were single (never married, not cohabiting). 10.8% were cohabiting. Only about 6% were married while the rest had experienced a separation or a divorce or widowhood. There were 534 cases with missing values. In the same vein as marital status, a large majority of the sample (82.9%) had never had a biological child while the rest had at least one child by 2003. 546 cases had missing values. Surprisingly, a little over a half (54%) lived in a household with no child under 18 years of age in 2003. A little over a quarter (26%) lived in a

household where there was one other child under the age of 18 years and another 13.1% lived in a household where there were 2 dependent children. Only about 4% lived in a household with 3 children under the age of 18 and only about 3.2% lived in a household with at least 4 children who were minor.

The four Family Capital factors, namely “Family Involvement,” “SES,” “Social Networks” and “Closeness-to-Parental Figures” had factor score averages of  $-.05$  ( $SD=.68$ ),  $-0.16$  ( $SD=.88$ ),  $-.04$  ( $SD=.65$ ) and  $-.04$  ( $SD=.61$ ) respectively. The range of scores was very restricted for factors 1, 3 and 4 and might result in challenges in estimating our regression models (see table 3.2). As for our outcome of interest, highest degree ever achieved, 11.2% of the sampled had no educational certification at all by the end of the 8-year study period (2010). 57.1% had a High School Diploma or Certificate of High School Equivalency (commonly known as the GED). 6.7% had an Associate degree. About a fifth (20.9%) had a Bachelor’s degree by 2010 and only about 4.1% had a Masters degree or higher.

Analysis of missing cases for specific variables revealed that there was substantial missing data in four variables, namely, the outcome variable (15.6%) and the two controls for transition to adulthood, marital status 11.3 % and parenthood status 11.6%. The rest of the variables had no missing values. An examination of the missing pattern using Expectation Maximization (EM) method did not show large discrepancies between the original mean values and the estimated (EM) means. In addition, EM correlations, with missing values filled in, using EM method showed slight improvements, especially for variables with large missing data. However, the Little’s MCAR test of whether the data was missing completely at random (MCAR) was significant  $\chi^2(20) = 173.640, <.05$ , indicating that the data was missing at random (MAR). Therefore, data imputation using EM method was used to replace missing values.

Further exploration of data suggested all the quantitative variables with estimated values had approximately normal distributions and small skewness except the SES factor (3.37).

Transformation of the SES variable only seemed to shift the variable from a positive to a negative skewness, therefore, the original variable was used.

### **Correlates of Outcome Variables:**

Two sets of bivariate analysis were conducted to assess the relationship between our predictor variables with the outcome variable. The relationship between the outcome variable and the categorical predictors was examined using crosstabs chi-square statistics. This technique helped to assess cell information including whether a statistically significant relationship did exist for each predictor with the outcome variable. Also an assessment of the frequency distribution of the categories in the predictors on the outcome variable using cumulative percentages distribution graphs was conducted. The analysis showed that all the categorical predictors had statistically significant relationship with the educational achievement variable (see Table 3.3). Race had a statistically significant relationship with educational achievement,  $\chi^2(10, N=3975) = 241.17, p < .05$ . Blacks and Hispanics have higher cumulative percentages at lower levels of educational achievement, that is, none, HS/GED and Associates, (85.8 and 84% respectively), compared to Whites whose cumulative percentage hovers around 65.5% (One can also see this by adding columns 2 and 3 of Table 3.3). Stated differently, about 34.5% of Whites had a Bachelor's degree or higher compared to only 16% and 14.2% of Hispanics and Blacks, respectively.

With respect to sex, 79.2% of males had an Associate degree or lower compared to 70.6% of females. Put differently, 29.4% of females had a Bachelor's degree or higher compared to males (20.8%). This relationship was statistically significant,  $\chi^2(5, N=3975) = 47.61, p < .05$ . Marital

status had a statistically significant relationship with levels of educational achievement,  $\chi^2(15, N=3742) = 200.19, p < .05$ . About 29.6% of those who were Single (never married, not cohabiting) had a Bachelor's degree or higher – almost 3.5 times the next highest groups – those Cohabiting (8.6%) and those married (8.9%). Only 5.4% of young adults who had experienced a separation or divorce had a Bachelor's degree or higher in 2010. A majority of respondents in these three groups (cohabiting, Married or Other) had only a high school/GED or lower, 86.9%, 86.6% and 89.2%, respectively. Herein, we have cells with very low frequencies that were collapsed further when conducting ordinal logistic regression. Last, there was also a statistically significant relationship between Parenthood status in 2003 and educational achievement,  $\chi^2(5, N=3732) = 348.81, p < .05$ . Nearly all (96.6%) of young adults who had achieved parenthood in 2003 had an Associate degree or lower compared to about 70% of their counterparts who were not parents. Not surprising, 30.8% of young adults without a child in 2003 have Bachelor's degree or higher by 2010 compared to only 3.4% of their counterparts who are parents.

### **Assessment of Continuous Variables**

A Spearman's Rho Rank Order correlation was conducted to assess the relationship between educational achievement and the continuous predictor variables in the study, namely, Family Involvement, SES, Social Network, Closeness-to-Parental Figures, Age of Respondent and Children under 18 in the respondent's household in 2003 (see table 3.4). All the independent variables had statistically significant relationships with educational achievement except for age. Also, all were positively correlated with education achievement except the number of children under 18 years in the household. Specifically, educational achievement was moderately correlated with Socioeconomic Status factor score ( $r_s = .507, p < .05$ ). Factor scores for Family Involvement had a slightly lower but positive relationships with educational achievement,  $r_s =$

.305,  $p < .05$ . Closeness-to-Parental Figures and Social Network factors were weakly but positively correlated with Educational Achievement,  $r_s = .234$ ,  $p < .05$ ; and  $r_s = .190$ ,  $p < .05$ , respectively. Age of the respondents had no statistically significant relationship with educational achievement,  $r_s = .017$ ,  $p > .05$ . The number of Children in a household in 2003 had a negative and weak statistically significant relationship with education achievement ( $r_s = -.229$ ,  $p < .05$ ), an indication that as values of number of children under 18 in the household increase, educational achievement monotonically decreases (that is, never increases).

The relationships among independent variables were also statistically significant for all except two pairs of relationships (See table 3.4). Family Involvement had positive, very weak to moderate, statistically significant relationship with other factors but had weak and very weak relationship with age and number of children in the house household under 18 years. SES also had positive but weak to moderate relationship with Family Involvement, Social Networks and Closeness-to-Parental Figures,  $r_s = .315$ ,  $p < .05$ ;  $r_s = .368$ ,  $p < .05$ ;  $r_s = .401$ ,  $p < .05$ , respectively. SES also had a weak but negative statistically significant relationship with number of children under 18 in the household,  $r_s = -.264$ ,  $p < .05$ . Social Network had a very weak but statistically significant relationship with Closeness-to-Parental Figures. Also, it has a weak but negative statistically significant relationship with number of children in the household under 18 years. Age of the respondent had no statistically significant relationship with SES or Social Networks. Lastly, number of children under 18 had negative but very weak to weak statistically significant relationship with other independent variables in the study.

### **Multivariate Analysis:**

Table 3.5 shows results of ordinal logistic regressions performed through SPSS PLUM to examine prediction of levels of educational achievement from the latent family capital construct

while accounting for the effects of demographic characteristics and transition to adulthood milestones. The ordered logistic analysis starts with a baseline model that examines the effects of only the family capital factors, from the EFA in Dissertation Paper 1, on the level of educational achievement of respondents in 2010. The second model adds young adults' demographic factors, namely, race, sex, age and whether in 2003 the respondent lived in a household with children under the age 18 years (dependent size). The third (and full) model adds two factors associated with transitions to adulthood milestones, namely marital status and parenthood status. For each of the three models estimated, I examine two kinds of measures (fit-statistics) to evaluate how well each model fits the data, namely: the model fitting information, where the -2 log likelihood chi-square statistics should be statistically significant,  $p < .05$ , indicating good model fit, as well as the goodness-of-fit- test statistics, where a non-significant chi-square statistic ( $p > .05$ ) indicates the model fits the data well (Tabachnick & Fidell, 2007; Warner, 2008). Assessment of overall model fit using the above criterion showed that the three estimated models fitted the data well. The pseudo r-squared information is also reported, although it is not really as useful in logistic regression. Also, for ease of reporting and interpreting the odds ratios for categorical variables, whenever the odds ratios for categorical variables are less than 1, the inverse (odds ratio for the reference group) is calculated and reported instead.

### **Model 1**

In Model 1, comparison of the of the -2 log likelihood ratios for the model with and without predictors showed statistically significant improvement with the addition of the Family Capital factors over the intercept only model,  $\chi^2 (4, N=3975) = 1016.03$ ,  $p < .05$ , an indication that the baseline model fitted the data well. The Nagelkerke pseudo  $R^2 = 24.8\%$ . Table 3.5 shows the regression coefficient (unstandardized) and the odds ratio around the 95% confidence

interval of how the individual predictors contributed to the model. Results suggest that two of the four factors of family capital in the model could statistically predict higher levels of education achievement while controlling of the other factors. Family involvement and the natal family's SES could significantly predict the level of educational achievement. To be specific, a unit increase of scores in the Family Involvement factor increases the odds of reporting higher levels of educational achievement by 57% while holding other factors constant. Similarly, a unit increase in the natal family's SES increases the odds ratio of higher levels of education achievement by 3.4 times. Surprisingly, social networks and a young adult's closeness-to-parental figures could not significantly predict higher levels of educational achievement.

## **Model 2**

Model 2 controls for demographic characteristics that were added to the base model. These controls included variables for presence of children under 18 years in the household, race, sex and age of the respondent. An examination of the model fitting information indicated that the final model with all the predictors was statistically significant over the intercept only model,  $\chi^2(9, N=3975) = 1196.01, P < .05$ . Also, an assessment of the goodness-of-fit test using the deviance criterion showed that there was a good fit of the model to the data,  $p > .05$ , indicating that the predictors, as a set, could significantly predict levels of higher educational achievement. The Nagelkerke pseudo  $R^2$  was .286 (28.6%). Results for the model information, the pseudo  $R^2$ , regressions coefficients and the odds ratio suggested that the added controls have a significant influence on levels of educational achievement. For instance, the two factors of family capital that were significant in the baseline model remain significant and in the expected direction. Also and as consistent with the resource competition hypothesis, a unit increase in the number of children under the age of 18 years in the household reduces the likelihood of higher

levels of educational achievement by about 23%. Race is also a significant factor but only for Blacks. Whites are 1.44 times more likely to have higher levels of educational achievement when compared to their Black counterparts. When gender is taken into account, young adult females are 1.74 times more likely to have higher levels of educational attainment compared to young adult males. As expected, age is positively associated with higher levels of educational achievement. Specifically, a unit increase in age is associated with about a 1.12 times (12%) increase in level of educational achievement.

### **Model 3**

Model 3 examines higher educational achievement of young adults when the effects of transitions to adulthood milestones related to family formation (cohabitating/marriage and having children) are controlled for. Overall, Model 3 fitted the data well,  $\chi^2 (13, N=3729) = 1361.41, P < .05$ . Also, an assessment of the goodness-of-fit test using the deviance criterion showed that there was a good fit of the model to the data,  $p > .05$ , indicating that the predictors, as a set, could significantly predict levels of higher educational achievement. The Nagelkerke pseudo  $R^2$  increased slightly to 33.5%. Results for the regressions coefficients and the odds ratio revealed three important findings worth noting: One, the two adulthood milestones controls were significantly associated with levels of educational achievement. Young adults who are single (never married, not cohabiting) are slightly more than twice (2.18 times) as likely to have higher levels of educational achievement when compared to their married counterparts. They are also 2.52 times as likely to have higher levels of educational achievement when compared to their cohabiting peers. As expected, having no child increases the odds of reporting higher levels of educational achievement by almost three (2.88) times.

Two, the significant family capital factors in Model 2 remained significant when controlling for the two adulthood milestones controls. To be specific, the effect of family involvement was now 1.55 times while that of SES reduced slightly (now at 2.99 times). Closeness-to-Parental Figures reached significance but in unexpected direction. Closeness-to-Parental Figures seem to reduce reporting higher levels of educational achievement by 12%. Three, there are notable changes in demographic characteristic factors. The effect of presence of other children under 18-years drops by approximately 9 percentage points to 14.2%. The effect for Blacks still holds. There is a slight increase in the effect of gender. Females are now about twice (2.11 times) more likely to have higher levels of educational achievement compared to young adult males. There is also almost a doubling in the effect of age. A unit increase in scores of age increases the prediction of higher level of educational achievement to about 26.5% while holding other factors constant.

To sum up, the latent family capital construct, as a whole, does impact educational achievement levels of the youth in this sample. That said, two of the four dimensions of the family capital construct seem to have positive and consistent association with higher levels of educational achievement levels as was initially hypothesized, namely, family involvement and SES. Surprisingly, family capital factors of social network and closeness-to-parental figures are inconsistent with initial prediction of educational achievement levels. Also, the factor representing Closeness-to-Parental Figures' effect is contrary to the stated hypothesis. Last, demographic and transition to adulthood milestones predictors are significant and consistent with expectation. The section that follows presents a discussion of these key findings as well as other findings related to the effects of the covariates on the educational achievement of contemporary young adults.

## Discussion

Research on the effect on family background on young adults' educational achievement could greatly benefit from utilizing a family capital measures that comprehensively captures the multidimensional aspects of family resources and processes. This family capital concept expands measures used in capturing family background characteristics. This study was an attempt to demonstrate how such a measure, a latent construct, developed in a previous study (Dissertation Paper 1) could be used to increase our understanding of how natal families influence their young adults' educational achievement levels. Several key findings emerged from the analysis: One, the latent family capital construct that captures characteristics of the family background that include "Family Involvement," "SES," "Social Network" and "Closeness-to-Parental Figures" is a promising and adequate measure whose model fits the data well, even with addition of other controls. Two, different dimensions of the latent family capital concept influence educational achievement differently. While Family Involvement and SES are positively and consistently associated with higher levels of educational achievement throughout the different models estimated, Closeness-to-Parental Figures is significantly associated with educational achievement only with inclusion of certain controls, namely, traditional milestones associated with adulthood (cohabiting/marriage and having a child), but is contrary to expectation.

Three, other controls such as race, sex, age, adult milestones (marital and parenthood status), significantly influence higher levels of educational achievement and in the expected direction. Last, presence of children under 18 years in a respondent's household is a significant factor while examining higher educational achievement.

Results from this study show that family capital does matter. Specifically, Family Involvement and SES consistently predicted higher levels of educational achievement in all the

models estimated. For both, their effect on educational achievement remains consistent and significant. For example, a unit increase in Family Involvement in the base model started at 56% and its impact hovered about this level as we controlled for other factors in subsequent models. Although, this was an expected finding as was initially hypothesized and there is evidence in the literature that shows that families do shape the educational experiences of their young adults, from helping them with college applications to selecting classes as well as maneuvering the higher education system (Dweyer, Hobson & McCloud, 2013; Lareau, 2008; Lareau & Weininger, 2008). Herein, we add to that body of evidence by clearly capturing the unique impact of family involvement as a distinct dimension of family capital of the natal family.

The effect of SES on educational achievement of children is a long established finding within the literature (Barrow and Schanzenbach, 2012; Bowles, Gintis & Osborne, 2005; Conley, 2001; Conley & Glauber, 2008; Greenstone et al., 2013; Jaeger, 2012; Lareau & Weininger, 2008; Loury, 2006; Ornstein, 2007; Reardon, 2011; Rouse & Barrow, 2006; Rumberger, 2010; Staff & Mortimer, 2008; Swartz, 2008; Whitman & Danzinger, 2011). It was interesting to see that in the base model, the impact of SES was substantial. A unit increase in score of SES predicted the odds of higher levels of educational achievement by over 3.4 times. As we added more controls, that effect remained significant and strong, hovering around 3 times the odds. Also, it is quite interesting to see that of all the factors that make up the latent family capital construct; SES impact was supreme and remained substantially large in predicting educational achievement. While this finding is consistent with other findings in the literature, it does add credence to the current call by scholars of reducing social and economic inequalities (Esping-Anderson, 2004; Furstenberg, 2006; 2008; Reardon, 2011; Rouse & Barrow, 2006; Rumberger,

2010; Ornstein, 2007; Whightman & Danzinger, 2011). If societal inequality is not addressed, educational achievement will continue to be stratified along social class statuses.

The lack of significance of the social network factor in all three models was surprising and against expectation. This is because social networks have been found to provide an extra layer of resources that could add to the support already provided by the family. Also, social networks do compensate for the lack of support by natal families when a young person chooses to use other connections such as relatives, friends, co-workers or professional counselors, mentors including the clergy (Staff & Mortimer, 2008). While some evidence suggests that social networks contribute positively to young adult life outcomes, especially when we consider labor market outcome for disadvantaged individuals (Fletcher, 2013; Kim, 2012; Staff & Mortimer, 2008), other evidence suggest that social networks might not have a direct effect in influencing outcomes for young adults educational achievement. Perhaps, the effect of social network could be indirect through its interaction with the young adults' immediate family (Jaeger, 2012; Loury, 2006). For instance, Jaeger (2012), examined educational achievement of a cohort of young adults, in the Wisconsin Longitudinal Study (WSL) and the NLSY79 – Children and Young Adults Supplement, focusing on whether the extended family (grandparents, aunts and uncles) of a young adult could influence their educational success. He used years of schooling and Duncan's Socioeconomic Index as the predictors for both generation 1 and 2 to predict education success for generation 3. His study found that there was no direct effect of generation 1 on education success of generation 3. However, when he included an interaction effect for generation 1 and 2, he found some effect although not a large one. He explained this finding by concluding that resources lacking within ones immediate family can be compensated by tapping into resources within ones social connection. Therefore, it could be that, the negative

association we found could be a result of the manner in which I measured social networks as being part and parcel of the latent family capital construct.

Also, the finding that closeness-to-parental figures was not significant, in the base model and model 2, was against expectation. Also surprising was seeing that once controls for milestones associated with adulthood (marital and parenthood status) were added to the model, closeness-to-parental figures reached significance but was negatively associated with higher levels of educational achievement. This is surprising as you would think that at such an early age, closeness-to-parental figures is important to young people. Parents play important roles at such an early age particularly with education achievement. Parents pay fees; they help their young ones with college applications and in making decisions about courses. Also, many parents follow up on their children while in college to make sure that their children are on the right track and usually act as sounding boards if advice is needed (Lareau & Weininger, 2008; Levine & Dean, 2012). Also, this factor was made up of three items that assessed who the youth turns to first if they had a problem around relationships, schooling/employment, and finances. Initial univariate analysis of the items showed that youth predominantly identified a parental figure as the first person they would turn to. Therefore, the negative association is a little surprising. It may be that young people see their parents doing what parents are supposed to do as parents and look at them as the first source of refuge when the going gets tough and not necessarily as close confidants during the educational attainment process. It could also be that as these young people are struggling to establish their independence during this prolonged trajectory of educational attainment, they maybe are trying to pull away from their parents, and therefore, even though the parents are the first people they could turn to for help, it does not necessarily mean closeness.

Even so, the significant but negative relationship with educational achievement may need further careful investigation.

There are two significant limitations to this study. One, during the initial data assessment, SES factor had a large positive skewness (3.37). Transformation of the factor did not help much as the skewness just shifted from positive to negative while still remaining large (-1.67). Therefore, the original factor was used. Also, the three models in this study seem to have some violation of proportional odds assumption presumed in ordinal logistic regression. That is, the slope coefficients in the model are assumed to be the same across response categories and therefore each model is estimated with a single equation. However, since the examination of our model fit information indicated that our models were significant and fitted the data well, it was not necessary to go back and fit less restrictive models, say multinomial logit models, as it would have changed the manner in which our outcome variable (educational achievement) is used in this study. That is, the outcome variable is not just categorical there is an assumption of an increasing order of education levels.

In summary, the conventional approach to increase education achievement for many students from low-income families is to focus on financial and institutional approaches (Kelly & Carey, 2013). For instance, some focus has been on the increasing federal, state and institutional grants/loans. Other efforts have been on establishing programs at higher educational institutions for the recruitment and retention of low-income students. While these efforts have achieved some success, they are usually expensive and unsustainable especially during times of economic downturn (Kelly & Carey, 2013). In the end, we find that that there continues to be a widening gap of educational achievement between students from high and low income families. Since research has already established that there are differences in the investments that high and

low income families make in their children, the task then is to identify important ingredients in the stock of family capital that are salient during the educational attainment process of young adults during their transitions to adulthood. This research has attempted to do just that. The study found that in the stock of family capital, there are two key ingredients that scholars and practitioners might do well to further focus on. SES is (and has been) important, but also Family Involvement seem to be of equal importance and its effect remain significant even when controlling for other factors salient in a young adult's life.

Perhaps, a promising approach to also consider, that has been largely overlooked in research and practice, is to starting developing low-cost interventions that could focus on leveraging the resource pool and processes of low income families. In the final chapter of this dissertation project, a brief critical review of programs in higher education institutions that focus on increasing underrepresented students' retention and graduation rates that also include a component of family involvement is presented. Thereafter, a brief discussion of a two generational intervention mechanism that could focus on working with both the parent and the young adults to improve educational attainment outcomes of low-income, minority and 1<sup>st</sup> generation students is presented as the next phase of this research endeavor.

## References

- Arnett, J. (2006). Emerging Adulthood: Understanding the New Way of Coming of Age. In Arnett, J. J., & Tanner, J. L. (2006). *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association.
- Aronson, P. (2008). Breaking barriers or locked out? Class-based perceptions and experiences of postsecondary education. In J. T. Mortimer (Ed.), *Social class and transitions to adulthood*. *New Directions for Child and Adolescent Development*, 119, pp. 41–54.
- Bailey, M. & Dynarski, S. (2011). Gains and gaps changing inequality in U.S. college entry and completion. *Working paper series National Bureau of Economic Research*, no. 17633. Cambridge, Mass: National Bureau of Economic Research.
- Barrow, L., & Schanzenbach, D. W. (2012). Education and the Poor. In Philip N. Jefferson (Ed.) *Oxford Handbook of the Economics of Poverty*. New York: Oxford University Press, pp. 316-343.
- Bartholomew, D., Steele, F., Moustaki, I. & Galbraith, J. (2008). *Analysis of multivariate social science data*. Boca Raton: CRC Press.
- Becker, G. (1993). Nobel lecture: the economic way of looking at behavior. *Journal of Political Economy*, 101 (3), p. 385-409.
- Becker, G. (1986). The economic approach to human behavior. In Jon Elster (Ed.). *Rational choice*. Washington Square, N.Y: New York University Press.
- Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4(3), p. 1–39.
- Berlin, G., Furstenberg, F. & Waters, M. (2010). Introduction the [Special] Issue. *The Future of Children*, 20 (1), p. 3-18.
- Berzin, S. C., & De, M. A. C. (2010). Understanding the Impact of Poverty on Critical Events in Emerging Adulthood. *Youth & Society*, 42, (2), p. 278- 300.
- Blank, R. M. (2011). *Changing inequality*. Berkeley: University of California Press.
- Blau, P. M., & Duncan, O. D. (1967). *The American occupational structure*. New York: Wiley.
- Bodovski, K. & Farkas, G. (2008). Concerted cultivation” and unequal achievement in elementary school. *Social Science Research*, 37 (3) p. 903–919.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, Mass: Harvard University Press.

- Bourdieu, P. (1986). The Forms of Capital. In John Richardson (ed.). *Handbook of theory and research for the sociology of education*. New York: Greenwood Press, p. 241-258.
- Bowles, S., Gintis, H., & Osborne, G. M. (2005). *Unequal chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- Chiteji, N. (2007). To have and to hold: An analysis of young adult debt. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Conley, D. & Glauber, R. (2008). All in the family? Family composition, resources and sibling similarity in socioeconomic status. *Research in Social Stratification and Mobility*, 26, p. 297-306.
- Conley, D. (2001). Capital for College: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59-72.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Danziger, S. & Ratner, D. (2010). Labor market outcomes and the transition to adulthood. *The Future of Children*, 20 (1), p. 133-158.
- Draut, T. (2005). *Strapped: Why America's 20- and 30-somethings can't get ahead*. New York: Doubleday.
- Draut, T. & Silva, J. (2004). Generation broke: The growth of debt among young Americans. *Borrowing to Make Ends Meet Briefing paper # 2*, October, 2004 at [www.demos.usa.org](http://www.demos.usa.org)
- Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Dwyer, R., Hodson, R. & McCloud, L. (2013). Gender, Debt and Dropping out of College. *Gender & Society*, 27(1), pp. 30-55.
- Esping-Andersen, G. (January 01, 2004). Untying the Gordian Knot of Social Inheritance. *Research in Social Stratification and Mobility*, 21, p. 115-138.
- Fetterman, M. & Hansen, B. (November 22, 2006). Young people struggle to deal with a kiss of debt. *USA Today*. Retrieved May 9<sup>th</sup> 2009 from

[http://www.usatoday.com/money/perfi/credit/2006-11-19-young-and-in-debt-cover\\_x.htm](http://www.usatoday.com/money/perfi/credit/2006-11-19-young-and-in-debt-cover_x.htm).

- Fischer, C. S., & Hout, M. (2006). *Century of difference: How America changed in the last one hundred years*. New York: Russell Sage Foundation.
- Fletcher, J. (2013). Social Interactions and College Enrollment: Evidence from the National Educational Longitudinal Study. *Contemporary Economic Policy*, 31(4), pp. 762-778.
- Furstenberg, F. (2010). On a New Schedule: Transitions to Adulthood and Family Change. *The Future of Children*, 20 (1), p. 67-87.
- Furstenberg, F. (2008). The intersection of social class and the transition to adulthood. *New Directions in Child and Adolescent Development*, 119(Spring), p. 1-10.
- Furstenberg, F. (2006). Diverging development: The not-so-invisible hand of social class in the United States. *Network on Transition to Adulthood Research Network Working Paper*, March 23-26, 2006.
- Fussell, E. & Furstenberg, F. (2005). The Transition to Adulthood during the Twentieth Century: Race, Nativity, and Gender. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.). *On the Frontier of Adulthood: Theory, Research, and Public Policy*. Chicago: University of Chicago Press.
- Greenstone, M., Looney, A., Patashnik, J. & Yu, M. (2013). Thirteen Economic Facts about Social Mobility and the Role of Education. *Working Paper, The Hamilton Project*. Found at <http://www.brookings.edu/research/reports/2013/06/13-facts-higher-education#>
- Guldi, M., Page, M. and Stevens, A. (2007). Family background and children's transitions to adulthood over time. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Houle, Jason N. 2014. "Disparities in Debt: Parents Socioeconomic Resources and Young Adult Student Loan Debt." *Sociology of Education*.
- Houle, Jason. 2014. "A Generation Indebted: Young Adult Debt across Three Cohorts" Forthcoming, *Social Problems*.
- Jackson, P. B., & Berkowitz, A. (2005). The Structure of the Life Course: Gender and Racioethnic Variation in the Occurrence and Sequencing of Role Transitions. *Advances in Life Course Research*, 9, pp. 55-90.

- Jaeger, M. M. (2012). The Extended Family and Children Educational Success. *American Sociological Review*, 77(6), pp.903-922.
- Kamenetz, A. (2006). *Generation debt: Why now is a terrible time to be young*. New York: Riverhead Books.
- Keister, L. A. (2005). *Getting rich: America's new rich and how they got that way*. Cambridge, UK: Cambridge University Press.
- Kelly, A. P., & Carey, K. (2013). *Stretching the higher education dollar: How innovation can improve access, equity, and affordability*. Cambridge, Massachusetts: Harvard Education Press.
- Kim, DH. (2012). The role of High Schools Connections to Colleges in Adolescents' Transition to Higher Education. *Sociological Spectrum*, 32(6), pp. 510-531.
- Kim, H. (2005). Parental Investment between Children with Different Abilities. In dissertation *Three essays using longitudinal sibling data*. 67, no. 09A (2006): p. 3532 - The University of Wisconsin – Madison.
- Lareau, A. (2003). *Unequal childhoods: Class race and family life*. Los Angeles: University of California Press.
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education*. Lanham, MD: Rowman & Littlefield Publisher.
- Lareau, A. (2008). Taking stock of class. In A. Lareau and D. Conley. *Social class: How does it work?* New York: Russell Sage Foundation.
- Lareau, A., & Conley, D. (2008). *Social class: How does it work?* New York: Russell Sage Foundation.
- Lareau, A and Weininger, E. (2008). Class and the Transition to Adulthood. In A. Lareau and D. Conley. *Social class: How does it work?* New York: Russell Sage Foundation.
- Lareau, A., & Weininger, E. B. (2003). Cultural capital in educational research: A critical assessment. *Theory and Society*, 32, (5-6) p. 567-606.
- Lee, J. (2012). An Institutional Framework for the Study of the Transition to Adulthood. *Youth & Society*, 0044118X12450643.
- Linneman, T. J. (2011). *Social statistics: The basics and beyond*. New York: Routledge.
- Loury, L. (2006). All in the Extended Family: Effects of Grandparents, Aunts, and Uncles on Educational Attainment. *American Economic Review*, 96:275–78.

- Mazumder, B. (2005). The Apple Does Not Fall Far from the Tree: New and revised estimates of the intergenerational inheritance in earning. In S. Bowles, H. Gintis & O. Groves (Eds.). *Unequal Chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- McLanahan, S., & Percheski, C. 2008. Family structure and the reproduction of inequalities. *Annual Review of Sociology*, 34, 257-276.
- McLanahan, S. 2008. Fragile families and the reproduction of poverty. *Fragile Families Working paper*, Princeton University. <http://crcw.princeton.edu/workingpapers/WP08-04-FF.pdf>
- Oreopoulos, P., & Petronijevic, U. (June 06, 2013). Making College Worth It: A Review of the Returns to Higher Education. *Future of Children*, 23(1), 41-65.
- Osgood, W., Foster, M. & Courtney, M. (2010). Vulnerable populations and the transition to adulthood. *The Future of Children*, 20 (1), p. 209-229.
- Osgood, W., Foster, M., Flanagan, C. & Ruth, G. (2005). *On your own without a net: The transition to adulthood for vulnerable populations*. Chicago: University of Chicago Press.
- Ornstein, A. C. (2007). *Class counts: Education, inequality, and the shrinking middle class*. Lanham, MD: Rowman & Littlefield Pub. Group.
- O' Shaughnessy, L (May 23, 2008). Debt-squeezed Gen X saves little. *USA Today*. Retrieved on May 9<sup>th</sup> 2009 from [http://www.usatoday.com/money/perfi/retirement/2008-05-19-generation-x-retirement\\_N.htm](http://www.usatoday.com/money/perfi/retirement/2008-05-19-generation-x-retirement_N.htm)
- Reardon, S. (2011): The widening academic achievement gap between the rich and the poor: new evidence and possible explanations. In R. Murnane & G. Duncan (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*. New York: Russell Sage Foundation Press.
- Rouse, C. & Barrow, L. (2006). U.S. Elementary and Secondary Schools: Equalizing Opportunity or Replicating the Status Quo? *The Future of Children*, 16(2), pp. 99-123.
- Rumberger, R (2010). Education and the reproduction of economic inequality in the United States: An empirical investigation. *Economics of Education Review*, 29 (2) , p. 246–254.
- Sanderfur, G., Meier, A. & Campbell, M. (2006). Family resources, social capital, and college attendance. *Social Science Research*, 35 (2) p. 525-553.
- Schoen, R., Landale, N. & Daniels, K. (2007). Family Transitions in Young Adulthood. *Demography*, 44(4), 807–820.

- Schoeni, R. & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Page, B. I., & Jacobs, L. R. (2009). *Class war? What Americans really think about economic inequality*. Chicago: University of Chicago Press.
- Powell, B., Steelman, L. & Carini, R. (2006) Advancing Age, Advantaged Youth: Parental Age & the Transmission of Resources to Children. *Social Forces*, Vol. 84, (3), pp. 1359-1390.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (July 01, 2006). Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review. *Journal of Educational Research*, 99, 6, 323-337.
- Settersten, R. A., & Ray, B. (2010). *Not quite adults: Why 20-somethings are choosing a slower path to adulthood, and why it's good for everyone*. New York: Bantam Books Trade Paperbacks.
- Settersten, R. and Ray, B. (2010b). What's Going on with Young People Today? The Long and Twisting Path to Adulthood. *The Future of Children*, 20 (1), p. 19-41.
- Staff, J., & Mortimer, J. T. (2008). Social class background and the school-to-work transition. *New Directions for Child & Adolescent Development*, 2008, (119), p. 55-59.
- Swartz, T. T. (2008). Family capital and the invisible transfer of privilege: Intergenerational support and social class in early adulthood. *New Directions in Child and Adolescent Development*, 119(Spring), p. 11-24.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson and Allyn & Bacon.
- Whightman, P. & Danziger, S. (2011). Poverty, Intergenerational Mobility and Young adult Education Attainment. *Research Network Working Paper (June)*, Network on Transitions to Adulthood.
- Zhan, M. (2013). *Youth debt and college graduation: Differences by race/ethnicity* (CSD Working Paper No. 13-08). St. Louis, MO: Washington University in St. Louis, Center for Social Development. Retrieved from <http://csd.wustl.edu/Publications/Documents/WP13-08.pdf>

**Table 3.1: Measures of Predicting Educational Achievement**

Construct	Indicators	Scale of Measurement
<b>Dependent Variables</b>		
	<b>Educational Achievement</b>	Ordinal Scale:
	Highest Degree Ever Achieved 2010 (CV_Highest_Degree_Ever_EDT_2010)	(0=None, 1=GED, 2=HS to 5=Masters, 6=PhD & Professional Degree (DDS, JD, MD))
<b>Independent Variables</b>		
	<b>Family Capital</b>	
	F1: Parental Involment	Ratio Scale
	F2: Socioeconomic Status	
	F3: Social Network	
	F4: Closeness to Parental Figures	
<b>Covariates</b>		
<b>Demographics</b>	Race	Nominal (1=Blacks, 2= Hispanic/Latino, 3= White)
	Sex	(0=Male, 1=Female)
	Age	Scale
	Dependent Size: No. Children under 18_2003(ChildHH_Und18)	Scale
<b>Transition to Adulthood Milestones</b>		
	Rev Marital Status	(1={Separated, Divorced Widowed}, 2=Married, 3=Cohabiting, 4=Never Married & No Cohabiting )
	Parenthood Status 2003	Nominal (0= No child, 1= At least one Child)

**Table 3.2: Sample demographics (N=4707)**

Variable	Categories	Frequency	(%/SD)
Age Mean (SD)		27.05	(0.8)
Age Range		25.75 - 28.58	
Sex	Male	2423	51.5
	Female	2284	48.5
Race/Ethnicity	Blacks	1215	25.8
	Hispanic	993	21.1
	Whites	2499	53.1
Rev Marital Status	Separated/Divorced/Widowed	44	1.1
	Married	240	5.8
	Cohabiting	452	10.8
	Single (Never married, no cohabiting)	3437	82.4
Parenthood Status 2003	No Child	3451	82.9
	At least one bio child	710	17.1
Dependent Size 2003 (No. Children under 18_2003)	Mean (SD)	0.78	1.09
	Range	0 to 8	
	0 Child	2246	53.8
	1	1086	26.0
	2	547	13.1
	3	166	4.0
	4 Plus	128	3.2
Family Capital - Mean (SD)			
F1: Parental Involment			
Mean (SD)		-0.0501	0.68
Range		-3.34 to 3.12	
F2: Socioeconomic Status			
Mean (SD)		-0.156	0.88
Range		-2.89 to 16.26	
F3: Social Network			
Mean (SD)		-0.0426	0.65
Range		-1.26 to 2.63	
F4: Closeness to Parental Figures			
Mean (SD)		-0.0398	(0.61)
Range		-1.93 to 2.44	
<b>Dependent Variables</b>			
Educational Achievement 2010	None	447	11.2
	GED & HighSchool Grad	2269	57.1
	Associate	265	6.7
	Bachelors	831	20.9
	Masters	128	3.2
	PhD & Professional Degree	35	0.9

Table 3.3: Education Achievement by Covariates (Percentages)

Variable	< HS/GED	Associates	Bachelors	Masters	Phd & Profession Degrees	Ch-Sq	df	N
Race								
Black	79.80	6.00	11.20	2.30	0.70			
Hispanic	77.80	6.20	14.40	1.50	0.10			
White	58.30	7.20	28.80	4.40	1.30	241.173***	10	3975
Sex								
Male	72.80	6.40	18.00	2.10	0.70			
Female	63.70	6.90	23.90	4.40	1.10	47.610***	5	3975
Marital Status								
Others (Separated/Divorced)	89.20	5.40	5.40	0.00	0.00			
Married	86.60	4.50	8.10	0.40	0.40			
Cohabiting	86.90	4.50	7.40	0.70	0.50			
Single (Never Married, No Cohabiting)	63.10	7.40	24.70	3.90	1.00	200.187***	15	3742
Parenthood Status 2003								
No Child	61.80	7.40	25.70	4.00	1.10			
At least one Child	92.20	4.40	3.00	0.20	0.20	348.813***	5	3732

\*\*\* $p < .001$ .

**Table 3.4: Sample demographics and Sample Description (N=4707)**

	Education Achievement 2010	FAC1_Family Involvement	FAC2_SocioE conomic Status	FAC3_Social Networks	FAC4_Closen ess-to- Parental Figures	age_yr	Child_HH_U nder_18_20
Spearman's rho	1						
Educational Achievement_2010							
FAC1_Family Involvement	.305***	1					
FAC2_SocioEconomic Status	.507***	.315***	1				
FAC3_Social Networks	.190***	.197***	.368***	1			
FAC4_Closeness-to-Parental Figures	.234***	.459***	.401***	.066***	1		
age_yr	0.017	-.256***	-0.007	-0.015	-.190***	1	
Child_HH_UNDER_18_2003	-.229***	-.083***	-.264***	-.192***	-.064***	-0.080***	1

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

Table 3.5: Unstandardized Coefficient &amp; Odds Ratio From Ordinal Logistic Regression: Models of Educational Achievement

	Model 1			Model 2			Model 3		
	B	SE	Odds Ratio	B	SE	Odds Ratio	B	SE	Odds Ratio
Retained Factors from EFA									
F1: Parental Involvement	<b>.450***</b>	.051	1.568	<b>0.447***</b>	0.052	1.563	<b>0.437***</b>	0.052	1.548
F2: Socioeconomic Status	<b>1.226***</b>	.049	3.407	<b>1.179***</b>	0.054	3.252	<b>1.096***</b>	0.056	2.993
F3: Social Network	.036	.049	1.037	0.039	0.050	1.040	0.017	0.05	0.741
F4: Closeness to Parental Figures	-.087	.059	0.916	-0.045	0.059	.956	<b>-.124*</b>	0.06	0.884
Family Size 2003 (No. Children under 18_2003)									
				<b>-.263***</b>	0.032	.769	<b>-.153***</b>	0.034	0.858
Race									
Black				<b>-.365***</b>	0.08	.694	<b>-.399***</b>	0.085	0.671
Hispanic				.124	0.093	1.132	.103	0.097	1.109
Sex									
Male				<b>-.554</b>	0.065	.575	<b>-.748***</b>	0.069	0.473
Age				<b>0.113**</b>	0.042	1.120	<b>.235***</b>	0.04	1.265
Marital Status									
Others							-0.085	0.354	0.918
Married							<b>-.781***</b>	0.156	0.458
Cohabiting							<b>-.925***</b>	0.119	0.396
Parenthood Status 2003									
No Child							<b>1.057***</b>	0.111	2.878
Model Fit Statistics									
X2	1016.032***			1196.011***			1361.413***		
df	4			9			13		
N	3975			3975			3729		
Pseudo R-Square (Naglerkerke)	24.8%			28.6%			33.5%		

\*  $p < .10$ ; \*  $p < .05$ ; \*  $p < .01$ ; \*  $p < .001$ .

CHAPTER 4: THE RELATIVE EFFECTS OF DIFFERENT FORMS OF FAMILY CAPITAL ON THE ECONOMIC WELL-BEING OF YOUNG ADULTS: AGE-25 DEBT HOLDING AND AGE-25 HOMEOWNERSHIP

**Introduction**

The context within which contemporary young adults are transitioning into adulthood is characterized by an escalation in household indebtedness (Montgomerie, 2013). American household indebtedness is comprised of the cumulative effects of consumer loans, credit card debt, educational loans and the size of home mortgages relative to income. This situation has been a few decades in the making, starting in the late 1970s and early 80s when the structure of the American political economy began to shift from the New Deal Keynesian macroeconomic approach to neoliberal macroeconomic policies of free markets for capital, goods and services; and deregulation and reduction in the role of government in social service provision (Kiely, 2007; Montgomerie, 2013; Scholte, 2005; Stiglitz, 2003). While some argue that this structural shift was good for overall economic performance, growth and prosperity, for many American households, particularly families that rely on wages from labor, this structural shift resulted in stagnation in real incomes to support subsistence and wealth building for social and economic mobility. This structural shift also resulted in a political economy that was predominantly consumer driven for economic growth and a retreat and privatization of welfare protections (Kiely, 2007; Montgomerie, 2013). For many American households, stagnating household incomes and a rise in a culture of consumerism increased their reliance on debt to respond to their new reality. In other words, indebtedness has become an integral part of American households' economic "security" and social functioning (Montgomerie, 2013).

Therefore, for young adults – individuals between 18–34 years - coming of age in the last two decades or so, many have grown up in households that are accustomed to heavy reliance on

debt, not only for their asset accumulation on big ticket items such as homes, automobiles, businesses and education expenses but also for their everyday living expenses to meet basic household needs (Fry, 2014; Houle, 2014; Kamenetz, 2006; Montgomerie, 2013). At the same time, young adults' demographic transition process is characterized by a protracted transition period to adulthood whereby they are seen to be taking longer to achieve the typical roles and statuses associated with adulthood. For instance, evidence suggests that, whereas previous cohorts of young adults completed their transition to adulthood milestones such as finishing school, joining the full-time labor force or establishing independent homes, in their late teens and early-to-mid twenties, the achievement of these same milestones is now seen to be taking place in the late twenties and early thirties (Arnett, 2001; Berlin, Furstenberg & Waters, 2010; Furstenberg, 2010; Furstenberg, Rumbaut, & Settersten, 2005).

Also due to the above structural shift, many young adults are coming of age in a context that is much different from what their parents experienced while transitioning into adulthood. For instance, in the current macroeconomic environment, an advanced education and skills training has become a necessity to the attainment of jobs with sufficient income to meet the basic needs of a household (Aronson, 2008; Danzinger & Rouse, 2007). In addition, due to globalization and international competition for capital, goods, services and labor, long-term employment tenures have become less common for many people who depend on wages to earn a living (Farber, 2007). Furthermore, due to improved standards of living that entail higher expectations for what is considered a "decent" level of subsistence, the cost of independent living has skyrocketed, leaving many young adults experiencing an extended transition period of semi-economic independence and an increasing dependence on families of origin for support during the transition to adulthood years.

A higher level of indebtedness exists not only among the parents of young adults. Young adults are also said to hold higher levels of debt. In fact, the amount of debt that young adults are assumed to hold, especially educational loans, is among the things that have featured greatly within the public discourse in contemporary U.S. society, in both print and electronic media (Business Week, 2005; Chiteji, 2007; Draut & Silva, 2004; Fetterman & Hansen, 2006; Friedman & Song, 2013; Fry, 2014; Houle, 2014; Kamenetz, 2006; Levine & Dean, 2012; Taylor et al., 2012). The attention given to young people's debt is due to the fact that unmanageable debt has the potential to significantly impact a young person's successful transition into adulthood. In other words, as many young people are generally exploring a variety of life course directions during this period, the presence of burdensome debt is generally thought of as something that might significantly affect their launch to successful financial independence and prosperity. What is surprising, however, is that, until recently, social scientists seemed to be dedicating little effort to empirically examine the subject of debt for young adults. The commonly given rationale, by some scholars, has being young people's debt is not a concerning social issue largely because it aligns well with the general life cycle economic theory that posit that they are actually at a stage in life where their incomes are relatively low compared to consumption as they try to establish themselves outside their natal families. Therefore, young adults are expected to be accumulating certain kinds of debts including automobiles, educational loans, and residential mortgages (Chiteji, 2007; Draut & Silva, 2004). However, young adults from different socioeconomic backgrounds have different capacities and knowledge on how to go about accumulating debt and assets. These capacities are partly influenced by the socialization towards financial matters they receive from their families as well as the natal family's support during the transition to adulthood. Families, however, have varying stocks of capital

endowments and research evidence on the roles families play in facilitating positive outcomes for their progeny suggests that based on families' social class positions, natal families strategically utilize their stock of resources to facilitate a successful transition in a variety of outcomes during transitions to adulthood for contemporary young adults (Kim & Chatterjee, 2013; Lusardi et al., 2010; Rouse & Barrow, 2006; Rumberger, 2010; Shanks et al., 2009; Staff & Mortimer, 2008; Whitman & Danzinger, 2011).

For instance, in educational attainment, that is, college preparation, college enrollment, college experience and performance as well as college graduation, research suggests that the educational attainment process in the current cohort of young adults is uneven for different groups based on the support they receive from their natal families. On-time graduation for low-income and minority students is especially low. Nearly 4 out of 10 young adults from high income and highly educated parents complete a 4 year college degree in a timely manner. In contrast, only 1 in 10 young adults with parents without a college education manages to do so (Dweyer, Hobson, & McCloud, 2013; Settersten & Ray, 2010). In addition, many low income young adults are assuming burdensome debt just to keep pace with their affluent peers (Guldi, Page, & Stevens, 2007; Settersten & Ray, 2010). What is more, disparities in outcomes between affluent and non-affluent young adults are not just limited to educational achievement, disparities can be seen in many other aspects of young adults' lives including health, employment and economic independence. Therefore, it is reasonable to wonder whether the kinds of assistance afforded to young adults from different social economic backgrounds during educational achievement, also extend to such things as debt and asset accumulation.

## **Toward a Broader Conceptualization of Family Capital**

Some research does exist that has examined how young adults' socioeconomic background influences the type and amount of debt as well as asset ownership (Boehm & Schlottman, 1999; Caputo, 2003; Chiteji, 2007; Chiteji & Stafford, 1999; Green & White, 1997; Hibbert et al., 2004; Houle, 2014, Kim & Charteerjee, 2013; Lursadi et al., 2010; Shanks et al., 2009). However, most of this research utilizes measures that only capture partial aspects of a family's social and economic background. For instance, social and economic status (SES) is a widely used measure and a well established body of evidence shows that it has a causal effect on the outcomes of children, youth, and young adults from these families. However, most studies do not go beyond SES, which, while crucial, is an incomplete measure of family capital, if we also seek to understand the parenting practices that contemporary parents utilize to influence their young people. Perhaps a more promising avenue to comprehensively capture the influence of family background is to carefully examine the underlying structure of the kinds of resources a family possesses and employs to influence the economic independence of their young adults. Therefore, this study situates its investigation in Pierre Bourdieu's (1986; 1984) theoretical conceptualization of family background measures as encompassing a multidimensional configuration of family resources and processes that could be economic, social and cultural (henceforth referred to as Family Capital). Specifically, this study will seek to examine how the emergent latent structure of family capital, when estimated using select measures of family resources and processes, could be used to examine the age-25 debt levels and home ownership of contemporary young adults from a nationally representative data set.

This paper proceeds as follows: First, it briefly reviews research on young adults' debt holding and asset accumulation, focusing on the influence of family background and other

determinants. Second, it presents the theoretical foundations of the family capital concept, including significance of the study and the research questions to be addressed. Third, a discussion of the data and methods used in this study is presented. Fourth, the paper presents the results of the analysis. Fifth, the paper ends with a discussion of the findings and implications for social welfare research and practice.

### **Research on Young Adults' Debt, Homeownership and Family Background**

**Debt.** Although a lot has been written about young adults' debt and asset accumulation, there is no good and consistent prevalence rates specific to young adults (as those found with issues such as alcohol and substance use, deviancy and involvement with the justice system, education graduation rates, or employment rates) about debt accrued or home ownership. Also, young adult debt has received more attention than young adults' home ownership. However, the vast amount of information about young adult debt is complex and compartmentalized along various types of debts that young people take on. Also, most of this information is produced by the popular media, other non-academic publications and/or among reports and activities of various advocacy groups or organizations. On close scrutiny of this information, one realizes that around the turn of the 21<sup>st</sup> century, there was an explosion of publications sounding alarm bells on the amount of debt that American society, in general, was amassing. It is not quite clear what triggered this type of public discourse to predominantly focus on young adults although some scholars have attributed this to the seminal work of Robert Manning (2000) *Credit card nation: The consequences of America's addiction to credit* (cited in Chiteji, 2007; Draut, 2005; Kamenetz, 2006). Manning (2000) pointed out that young people, particularly college students, were amassing unprecedented levels of credit card debt and seemed to be naïve about the rules and interest rates associated with this debt. Interestingly, leading newspapers and magazines

started carrying opinions and editorials about the increasing indebtedness of young people focusing on different aspects of the growing debt such as the of type of debt (student loans, credit card or installment loans), or the total amount held by young adults vis-à-vis the general population (Business Week, 2005; Draut, 2005; Draut & Silva, 2004; Fetterman & Hansen, 2006; Kamenetz, 2006; O' Shaughnessy, 2008).

During this same period, about mid 2000s, a myriad of books also emerged specifically focusing on this subject and two of the books have been heavily cited, namely Tamara Draut's (2005) *Strapped: Why America's 20- and 30-somethings can't get ahead* and the other by the journalist Anya Kamenetz's (2006) *Generation debt: Why now is a terrible time to be young*. All these popular media publications, taken together, managed to accomplish several things. For one, they drew attention to the fact that in contemporary society, young adults might be assuming greater and growing amounts of debt than other demographic groups in the population, particularly those in middle adulthood (35-54 years) and the older adults (55-64 years). Two, this level of debt may be unprecedented, and was thought to be even higher than what their parents accrued when they were the same age or even more than any of the previous cohorts of young people. Three, student loans and credit card debt were touted as the most prominent types of debts assumed by young adults and together formed a lethal combination that threatened young adults' future financial well-being and prosperity.

However, is the above popular media discourse supported by credible or official data? The U.S. government has been producing brief official reports about trends in family finances since 1963. These official trends are based on national surveys (primarily Survey of Consumer Finances) conducted every 3 years and are reported in the Federal Reserve Board's bulletins (Aizcorbe, Kennickell, & Moore, 2003; Bricker et al., 2012; Bucks, Kennickell, Mach, & Moore,

2009; Bucks, Kennickell, & Moore, 2006; Kennickell, Starr-McCluer, & Surette, 2000). Table 4.1 has been created from the five bulletins above. Together these bulletins provide a general overview of the proportion of young adult (18-35 years) households' indebtedness over a 15 year period (1995-2010), with the caveat that no statistical inferences are implied, rather, the data is presented here only for illustrative purposes.

An examination of trends in young adult's debt based on the Federal Reserve Board bulletins reveals several important findings: The reports reveal that the previous alarms that alluded to an explosion in young adults' debt since the turn of the century might have been overstated. Young adults' indebtedness has been generally consistent for the last decade and a half (see Table 4.1). Though young adults' debt fluctuates over the years, it hovered around the same range. For instance, the proportion of young adults having any kind of debt between 1995 and 2001 was somewhat the same; in the 81-83% range. There was a 2.7 percentage point drop by 2004, possibly due to the explosion of the publication about young adults' indebtedness, to about 79.8%. However, in the period leading up to the Great Recession where there was expansion of credit and housing finances, the proportion of young adults having any debt increased by about 3.7 percentage points to stand at 83.5% - back to the mid 1990s levels. As the economy collapsed due to the credit and housing bubble, nearly all American households reduced their debt holding, including young adults. In 2010, the proportion of young adults holding any debt had reduced by about 5.7 percentage points to 77.8%. This trend in indebtedness mirrors the general population and is only slightly lower than the two most indebted age groups, those in the 35-44 and 45-54 age groups.

A similar trend is observed in installment loans such as student loans and auto loans, but not in the credit card balances. The proportion of young adults carrying credit card balances has

been gradually declining from the mid-1990s. There was only a 1 percentage point increase during the rally to the Great Recession. Thereafter, there has been a sharp decline of almost 10 percentage points and only about 39% of young adults carried credit card balances in 2010. That said, it is also evident that although the proportion of young adults with debt remains stable, the proportion of those experiencing debt burdens (defined as having debt that is more than 60 days past due) was on a gradual growth up to the Great Recession. It is also interesting to see that in the years that the proportion of young adults with any debt seemed to decrease, the percentage of young adults experiencing higher debt burden seemed to increase. It could be that there are institutional factors at play, whereby institutions reduce their extending credit to young adults due to a greater number of them falling behind in their payment rather than young adults changing their financial behaviors.

It should be noted that no causality is implied herein and different explanations could lend themselves to the interpretation of these trends. That said, in 2010, approximately 10.4% of young adults were experiencing debt burdens. It is also important to note that a higher proportion of young adults have been consistently experiencing debt burdens compared to other age groups over the 15 year period. The only exception was in 2010, where those in the middle ages had higher rates, 15.7% (35-45 age group) and 12.6% (45-54 age groups).

Based on a review of the literature on young adults' indebtedness, there is only a single empirical piece of work that has attempted to carefully interrogate the issue of young adult indebtedness. The work is part of an edited volume released by the MacArthur Network on Transitions to Adulthood - Sheldon Danziger and Cecilia Rouse's (2007) *Price of independence: Economics of early adulthood*. In this volume, Ngina Chiteji examines young people's debt holding and trends in comparison with the general U.S. population and previous cohorts of

young adults, as well as the relationship between debt and achievement of certain milestones such as marriage, homeownership and parenthood that have traditionally symbolized attainment of adult statuses.

Using the 2001 data from the Survey of Consumer Finances (SCF) and defining young adults as individuals between 25 and 34 years old, her findings concur with the Federal Reserve's *Bulletins*. She finds that the proportion of young adults holding debt has remained fairly stable for nearly 4 decades. In 2001, approximately 85% of households headed by the 25-34 year-olds held some kind of debt and similar trends of 83% and 85% held in 1983 and 1963, respectively. Although, total debt value appears to increase between 1983 and 2001, from a median of \$8,000 to \$25,000, respectively, the debt burden was only experienced by a minority of young adults' households (less than 16%). Therefore, she makes 3 conclusions relevant to the present study: First, today's young adults' indebtedness is not unusual or problematic in comparison with the general U.S. population or young adults from previous cohorts. For example, she finds that while 85.1% of young adults' households have some type of debt, in the general population, approximately 75.1% of all U.S. households also carry some type of debt. She rationalizes that the 10 point difference is not surprising if one would also consider the stage in life at which these young adults are in, where borrowing for various reasons such as skills training/education, housing, purchase of an automobile *et cetera* is necessary. Second, she concludes that for a majority of young adults, debt is not a key issue. Only a small proportion (less than 16%) of young adults have debt levels that they would not be able to service for 3 months if something interrupted their current income sources. Therefore, the much publicized concern regarding high indebtedness of young adults is unwarranted. Finally, debt seems to have only a marginal effect on homeownership.

**Home Ownership.** The subject of young adults' homeownership is not as controversial as the just presented issue of debt holding. This is largely due to the fact that a large proportion of young adults are not home owners. In fact, there is hardly any data on home ownership rates for the youngest age group in early adulthood (18-25 years). After age 25, home ownership does tend to pick up as many young adults establish their independent homes and begin their family formation, but even then rates are low compared to the general population of adults.

Additionally, there are huge differences in home ownerships between age specific cohorts of young adults: the younger young adults (the 18-25 year olds), those in the middle (25-29 year olds) and the older group (the 30-34 year olds). For instance, looking at the Census Bureau data estimates for a 20 year duration 1993-2013, we find that, on average, less than a fifth of the youngest cohort are home owners. For the middle group, home ownership increases to around 34-40%, depending on the year of observation. For the oldest cohort, home ownership rates jumps to around 48.4% to 56.5 (Calis & Kresin, 2014). In short, home ownership generally increases with age and there is a lot of heterogeneity of pathways to home ownership during young adults' transition period.

In 2010, the national home ownership rate was estimated to be about 67.3% (Callis & Kresin, 2013). Understandably and particularly due to the impact of the Great Recession, this home ownership rate was in decline from the 2004 peak of 69.1 (Callis & Kresin, 2013; Emmons & Noeth, 2014). In the same year, home ownership among young adults (those below 35 years) was about half that of the general population, at 37.5%. This was also a plunge from its 2004-2006 peak where it hovered around 48%, although there are differences with the age specific cohort, with younger cohort having less rates compared to their older peers. There is no data for the youngest group, but actual rates for the other two group were 41.5% and 56.7% for the 25-29

year olds and 30-34 year olds, respectively. Just as the credit and housing rally seemed to lift all boats, with the burst, nearly all of the U.S. households were hugely impacted and home ownership among young adults declined rapidly. For example, in the first year after the peak, the home ownership rate among young adults dropped by approximately 7 percentage points to 41% in 2007. Furthermore, this rate continued to drop with every consecutive year (Callis & Kresin, 2013). Researchers contend that young adults' home ownership is primarily influenced by the economic cycles, real estate values and individual choices, including other factors that may influence individuals to purchase homes such as income or household size. During economic rallies like the one we just had during 2003-2007, young people are able to move in and out of the housing market. However, after a burst many lose their homes through foreclosures or distressed sales. And, for those lucky enough to keep their homes, usually starter homes, the average value of their homes do not seem to recover as fast as the average housing values for the middle and older adults (Emmons & Noeth, 2014). Also, with the current cohort of young adults that has a protracted transition to adulthood, some researchers argue that they may be simply retreating from home ownership (Emmons & Noeth, 2014; Taylor et al., 2012).

### **The Role of Family Capital in Transitions to Adulthood:**

In a society where it has become acceptable and even a necessity to assume large amounts of debt to support what is considered an adequate standard of living, the role that natal families play in influencing their young adults' financial behavior has become even more critical. Natal families can directly and indirectly, through modeling prudent financial behaviors, socialize their young adults to cautiously assume debt to enhance their well-being and functioning (Brown et al., 2014; Hibbert et al., 2004; Hillman, 2014; Keister, 2005; Kim & Chatterjee, 2013; Lursadi et al., 2010). For instance, research has shown that natal families can

simply influence their young peoples' debt holding by talking to them or deliberately educating them on money matters. Natal families can also influence their young people about debt by sharing with them their aspirations and expectations towards responsible personal financial management (Hibbert et al., 2004; Kim & Chatterjee, 2013). For example, in one study, researchers found that young adults who reported growing up in households where parents demonstrated prudent financial behaviors such as living within their income, saving regularly, paying bills on time as well as avoiding unnecessary debt, the young adult respondents were more likely to report lower financial strain as they transitioned into adulthood. They were also more likely to engage in debt avoidance behavior and had less inclination to misuse their credit cards (Hibbert et al., 2004). In yet another study, researchers found that childhood financial socialization was significantly associated with young adults savings account ownership, credit card ownership and also lack of financial anxiety about meeting one's financial obligation (Kim & Chatterjee, 2013).

Use of family capital, that is family resources and the processes through which resources are deployed, can take many forms and be geared to meet a variety of purposes. For example, it can simply be aimed at encouraging the young adult to take up only the amount of debt that will not result in financial strain or simply influencing the young adults towards the avoidance of risky debt by helping them be knowledgeable about such things as interest rates, fees, prepayment penalties and risk evaluation. It can also be used to help the young person prudently manage debt once assumed by enlightening them on the benefits of on-time payments, and restraining oneself from misusing credit privileges in order to build sustainable financial futures. A recent study by Hillman (2014) of college educated student and student loans default found that, although there were differences in debt holding between young graduates from upper

income versus low-income households, student debtors with less familial involvement (an aspect of family capital) were more likely to default. Also, during periods of unemployment they were less likely to receive assistance from their family in repaying the student loans. Therefore, this study interrogates the possibility that contemporary natal families use their stock of economic, social, and cultural capital including a variety of family processes, to engage their young adults in pro-active and positive financial management behavior characterized by debt avoidance or strategically taking up debt and then carefully managing it. It is hypothesized that family capital, that includes various resources and processes, will be negatively related to age-25 debt levels.

Family capital of natal families can influence young adults' asset ownership in several ways. Parents are able to mold their young adults' attitudes and inclination towards asset ownership through sharing their aspirations and expectations about ownership of such things as savings accounts, money market accounts, stocks, an automobile or even a home. They are also able to influence their children's behaviors towards the acquisition of specific assets either directly with transfer of economic resources or indirectly through use of their social and cultural capital (Shanks et al., 2009). For instance, in the purchase of a first home, the natal family can indirectly influence their young adult towards homeownership by simply owning a home and sharing with their young person the benefits associated with being a homeowner such as fixed housing costs over time for homeowners with fixed interest mortgages or tax deductions during the annual tax filing. In addition, parents can assist their young adults with coming up with a sufficient down payment (say 10 or 20%) since they know that a higher down payment lowers interest rates charged on the principal financed and results in reduced monthly mortgage payments. In addition, the parents can recommend a real estate agent or lending agent that they know or have already worked with. Furthermore, parents can assist their young adult in

understanding the effect of different lending rates or use of discount rates, the advantages and disadvantages of using a single financier such as their local bank versus a mortgage broker. They can also assist their young adult in improving their credit, for example taking care of collection debt, in preparation to beginning the process of buying a home. Also, parents can assist their young adult in examining the mortgage contract before closing on a home. Taken together, all these forms of familial assistance can make the home buying process and experience smoother for the respective young person.

There is a long established body of research that convincingly shows that natal families' background characteristics do in fact influence a variety of asset accumulation of children from these family (Boehm & Schlottman, 1999; Caputo, 2003; Conley, 1999; Elliot & Friedline, 2013; Friedline & Song, 2013; Green & White, 1997; Lareau, 2003; Lareau & Weininger, 2008; Hirschl & Rank, 2010; Shanks et al., 2009; Sherraden, 1991; 2003). For example, Friedline and Song (2013) used the Panel Study of Income Dynamics (PSID) data to examine the effect of having a savings account in childhood on accumulation of savings, assets, debt and net worth in young adulthood using propensity score matching. They found that young adults accumulated more savings, and other kinds of assets including net-worth, when they had savings accounts as children compared to their peers who had no savings account. As a result, it is also hypothesized that family capital will be positively associated with home ownership at age-25.

To sum up, the existing literature has established that debt holding and asset ownership are significantly associated with a host of other factors such as race, sex, income, educational attainment, student loans, marital and parenthood status. For instance, Black young adults are less likely to hold debt (installment debt and credit card balances) compared to their White peers (Shanks et al., 2009). Also, they are more likely to hold student debt than their White

counterparts (Houle, 2014). Furthermore, research shows there are differences in debt holding between men and women (Friedline & Song, 2013; Kim et al., 2012). Young adult males accumulate less debt than young adult females (Friedline & Song, 2013). When it comes to homeownership, similar rates as in the case of debt are observed. Socioeconomically advantaged young adults are more likely to be home owners than their economically disadvantaged peers. Whites are more likely to be homeowners than are members of minority groups (Conley, 1999; Emmons & Noeth, 2014). Stated differently, asset poverty is highly associated with being Black, single and without college education (Hirschl & Rank, 2010). Last, there is evidence to suggest that young adult debtors with student loans have delayed transitions into adulthood relative to the non-student loan debtor peers -which also affects home ownership rates for this group (Addo, 2014). However, less is known about the ways in which dimensions of family capital other than SES (such as Family Involvement, Social Networks and Closeness-to-Parental Figures) may influence debt and asset accumulation.

### **The Parental Investment Framework and Distinct Forms of Family Capital:**

A number of frameworks have been proposed by scholars in their attempt to unearth the various ways in which social origins influence life chances. One prominent framework is the Parental Investment Framework (Becker, 1993; Becker & Tomes, 1986; Bourdieu, 1986). There are two influential yet distinct viewpoints in this framework, one in the field of economics and the other in sociology. The economic viewpoint has been influenced by the work of Becker and Tomes (1986) and focuses on how parental investments interact with children's natural endowments (abilities) and social opportunities that lead to differences in life outcomes particularly in earnings and educational attainment (human capital development). Parental investment is seen as either reinforcing or compensating naturally endowed abilities (Becker,

1993; Kim, 2005; Willis, 1986). In sociology, Pierre Bourdieu advanced a similar notion of parental investment from a family capital perspective (1986). Bourdieu proposed that family capital can exist in three distinct forms, that is, as economic, social and cultural. These divergent forms of capital could be invested in children and the activities that children engage in resulting in the development of human capital (educational attainment) as well as habits and preferences which could influence the children's life outcomes.

This study follows Bourdieu's perspective on family capital. Bourdieu (1986) proposed a family capital perspective that has a multidimensional configuration entailing economic, social and cultural components of family resources and processes. The economic component was assumed to constitute material and financial wealth. The social component he argued to be the aggregate of actual or potential resources derived from the pool of one's social network of relationships, which could be more or less institutionalized. He envisioned cultural capital to be the habits, attitudes and preferences that children are socialized into that can be used as resources to navigate a variety of social systems and contexts (Bourdieu, 1986). In other words, economic capital involved monetary resources, social capital involved resources or benefits derived from ones social connections while cultural capital involved knowledge about social behavior deliberately imparted to help an individual function effectively in a social context. Bourdieu further argued that this multidimensional family capital framework could be seen as a model with three orthogonal axes (Bourdieu, 1986; Weininger, 2005). The first axis constitutes of the *total volume* of capital (economic, social or cultural). The second axis constitutes the *composition* of capital possessed. That is, does a family possess a lot of capital in the three dimensions versus a lot of economic capital but little social or cultural capital and vice versa?

The third axis constitutes the *stability or change* (over time) of both the volume and composition of capital a family enjoys.

Bourdieu's framework has extensive use in the literature but has also attracted a lot of criticism including the methodological difficulties of measuring the different dimensions of capital using existing data. The limited accounting of the multidimensional family capital characteristics is in large part influenced by what researchers can do with available data and the desire to use parsimonious models in data analysis (Bartholomew et al., 2008, Tabachnick & Fidell, 2007). Perhaps a careful attempt to apply latent construct analysis to longitudinal data that includes a range of measures associated with the theoretical dimensions of family capital could help move the field forward and overcome the above challenges.

This study, therefore, builds upon a previous study (Dissertation paper 1), that explored the latent structure of a family capital construct when estimated using distinct family background resources and processes measures that are economic, social, and cultural. To be specific, the previous paper used an exploratory factor analysis (EFA) to examine the underlying structure of 14 select indicators based on the work of Pierre Bourdieu (1986; 1984) on forms of family capital and Annette Lareau's (2000; 2003) work on family processes. The EFA revealed a four factor model and further analysis to assess the internal consistency of items that made up each of the factors revealed that the 4 factor model was reliable. Cronbach's alpha values ranged from acceptable (.59) to good (.80). The 1<sup>st</sup> Factor appeared to capture aspects of Parental Involvement, the 2<sup>nd</sup> Factor appeared to capture Social Economic Status (SES), the 3<sup>rd</sup> Factor appeared to capture respondents' Social Networks and the 4<sup>th</sup> Factor appeared to capture Closeness to Parental Figures.

The primary aim of that first paper was to examine whether there are distinct dimensions of family capital when estimated using select measures of the family background that are economic, social and cultural. A second paper used these factors of family capital to examine whether they could predict educational achievement of a contemporary cohort of young adults, while also accounting for select demographic and milestones associated with adulthood characteristics. Results suggested that the latent family capital constructs could predict the educational achievement of young adults. Specifically, factors representing Family Involvement and Social Economic Status of the natal family significantly and consistently predicted educational achievement.

This paper's primary aim is to extend the application of the family capital construct to another domain of young adulthood, indebtedness and home ownership –both of which are crucial to financial security and wealth accumulation over the life course. To be specific, the current study seeks to examine the effects of the latent family capital construct on age 25 debt and home ownership of a contemporary cohort of young adults, while also accounting for select demographic characteristics, milestones associated with adulthood, and educational achievement including student loans.

Social welfare researchers, policy makers and practitioners will do well to examine the question of debt and asset ownership for contemporary young adults. Debt and assets are two sides of the same coin and are vital to young adults' economic well-being and social functioning of present and future citizenry. Debt is a double edged sword – it could lead to asset accumulation, financial security and economic mobility. It can, also, lead to a life of financial ruin and misery. The main contribution of this study to the literature is that it attempts to expand the ways in which we study family background, specifically, moving from utilizing just a few

characteristics of family background, such as SES to investigating the effects of different dimensions of family capital on young adults' life outcomes. Also, this study seeks to demonstrate how the latent multidimensional family capital model identified in the previous study could help shed new insights into the processes through which inequalities and/or advantage could be perpetuated between generations by examining how it contributes to the economic well-being of transitioning young adults.

To recap, the central question we seek to investigate is, what is the effect of the key dimensions of family capital on overall young adult indebtedness and homeownership at age 25? We hypothesize that young adults with higher levels of family capital on four distinct dimensions of family capital, Family Involvement, SES, Social Networks and Closeness-to-Parental Figures, will have lower levels of age-25 debt holding and higher levels of age-25 homeownership than will young adults with lower levels of family capital.

### **Methods**

This study will use data from the National Longitudinal Survey of Youth 97 (NLSY97). The goal of this paper is to examine the direct and indirect effects of family capital on age-25 debt and age-25 homeownership. The NLSY 97 has several strengths worth mentioning: The sample is a cohort of young people transitioning to adulthood in the last decade or so (2003-2013). During their transitioning years (2003-2010, the study period), the economy experienced a major economic cycle of boom and bust that greatly impacted the outcomes of interest in this analysis. The economic cycle was characterized by the 2001 to 2007 financial credit and housing bubble as well as the 2007 to 2009 recession, and the post 2009 recovery from the recession. During the boom years, many people were able to access easy credit (including young adults). Also, many people were able to become home owners. When the bust happened, many people

including young adults were hugely impacted through lost jobs, savings, investments (including homes) and their sense of economic security. For young adults transitioning into adulthood, family support could have become even more instrumental for their economic well-being. The NSLY97 is also appropriate because it collects asset and debt information for young adults beginning from age 20, then at age 25 and 30. This information is created by the data archivist based on the most recent information reported for all respondents regardless of whether a young adult participates in the survey in the year they turn 20, 25 or 30. Unfortunately NLSY97 does not differentiate the type of debt young adults carry among installment loans, credit card and auto notes. These three types of loans are added up into a single value. Mortgage debt and students loans are measured separately.

This study's sample is derived from the two previous studies already conducted in this project. The first study, mentioned above, was conducted to identify the underlying dimensions of family capital (N=4,707). The dimensions identified were then used, in the second paper, to predict educational attainment of young adults (highest degree ever achieved by 2010). Since, in this current study, we aim to predict the impact of educational loans on age-25 debt and age-25 homeownership, we restricted the sample to young adults who had enrolled in postsecondary schooling at least once during the 8 years of the study period. In other words, we only use those young adults who were at a risk of assuming educational debt. This criterion reduced the sample for analysis to 2734 respondents.

### **Measures:**

**Dependent Variables.** This study has two outcomes of interest: Young adults' outstanding debt at age 25 and home ownership status in 2010 (see table 4.2).

**Debt.** The NSLY97 collects a variety of financial information about the respondents' assets and debt information. Debt information in the NLSY97 consists of three primary types of debt: Mortgage debt, educational debt and other outstanding debts for the household, which could include credit card, auto notes and other installment payment obligations such as medical bills. Debt information was also collected at each round but the data archivist also created debt variables for specific age points, that is, debt at age 20, 25 and 30. Since the members of the sub-sample used in this study are all above age 25, but had not reached age 30, this study used the created outstanding debt at age 25 variable (excluding mortgage and student loans). *Debt at Age 25* is a continuous variable and was top coded at \$370,000.

**Home ownership.** Similar to debt, the NLSY97 has several measures that could be used to examine asset ownership of the young adult and includes the value of respondent's financial assets, value of a respondent's non-financial assets, and measures of house value, house debt and house type. House type is a created variable by the NLSY97 data archivists that captures the type of housing a respondent owns at different age points, 20, 25 and 30 with values 1=House, 2=Ranch/Farm, 3=Mobile Home, 4=Mobile Home and Lot, 5=Lot for Mobile Home, 6=R does not own, 7= Unit and 8=Building. A dummy variable, *Age-25Homeownership*, was created with values 0=does not own and 1= home owner.

**Predictor Variables.** Predictor variables include the four retained factors of family capital as well as the educational achievement levels by 2010 and cumulated educational debt in 2010.

**Family capital.** The latent family capital construct is measured using the four retained factors from the exploratory factors analysis (EFA), estimated in the first paper of this project. These factors are used as indicators of the latent family capital construct and include, *Family*

*Involvement, Social and Economic Status (SES) of the natal family, Social Networks and Closeness to Parental Figures.* All these factors are on an interval/ratio scale of measurement.

***Educational achievement.*** This study measures educational achievement as the highest degree achieved. In the NLSY97, there are two variables that measure degree achievement. The first variable measures highest degree reported as of the survey interview date per year (CV\_Highest\_Degree\_YR). The second variable is a created variable by the NLSY97 data archivist and measures highest degree ever reported (CV\_Highest\_Degree\_Ever) for all respondents regardless of whether they were interviewed in the current round of data collection; that is, the most current information on the young adult across survey rounds. This study used the created variable, *Highest Degree Ever in 2010* (CV-Highest\_Degree\_Ever\_EDT\_2010). This variable is measured on an ordinal scale with values that range from 0= none/no schooling to 6= PhD and 7=professional degrees that include Doctor of Dental Surgery (DDS), Doctor of Medicine (MD) and Juris Doctor (JD). Due to small cells at the lower and upper end of the distribution, this variable was further collapsed to make conceptually meaningful categories with values 0= High school level and below, 1=Associate, 2= Bachelors, 3=Graduate degrees. As multiple regression does not work well with categorical variables, three dummy variables are created with graduates as the reference category.

***Educational loans.*** In the NLSY97 data, educational loans are measured as a two part process. First, youth are asked to report on total loans (government or private) borrowed from a school per term with the question, “*other than assistance you received from relatives and friends, how much did you borrow in government-subsidized loans or other types of loans while you attended this school/institution this term?*” Of the total amount borrowed, youth are then asked to report on amount outstanding (*How much is still owed on these loan(s)?*). This study

uses the amount of educational loans still outstanding to exclude loans that were immediately repaid. A total annual educational loan variable is constructed by summing up all educational loans outstanding per school, per term, per year for the 8-year study period. The total loans per year are then summed up to create a total cumulated loan in 2010 variable (*Cumulated Educational Loan\_2010*). This variable is then collapsed into four categories (*FinalCumEduLoans2003-2010*) with values 0=No Outstanding loans, 1= \$1 to 5,000, 2=\$5,001 to 10,000, 3=\$10,001 to 20,000, 4=\$20,001 or more). Again, this categorization was made in order to create meaning categories and in line with recent research (see Zhan, 20013 and Dwyer-Hodson & McCloud, 2013). Herein, dummy variables are also created with the top category, that started at around the 85<sup>th</sup> percentile, as the reference group.

**Control Variables.** Several factors that may have an impact on the debt holding and asset ownership of young adults include race, sex, income, marital status and parenthood status were used as controls.

**Race.** In the NLSY97, race and ethnicity is a categorical variable with four values, Black, Whites, Mixed Race and Hispanic. In the previous study (Paper 1), the mixed race category who constituted only .9% of respondents in the data were already dropped. Therefore, the Race variable in this study was nominal with values of 1=Blacks, 2=Hispanics and 3=Whites. Two dummy variables were created to use in the regression analysis with White as the reference group).

**Sex.** Sex was a dummy coded variables with values 0=Male and 1=Female

**Family Income 2010.** This variable is created by the NLSY97 data archivist using the gross family income in the previous year. Gross Family Income is income from different sources in a respondent's household including income from spouses/partners. Family income 2010

variable is a continuous variable with highest values top coded using the average value of the top 2 percent of cases at the higher end of the income distribution at \$290,810.

***Marital Status.*** Evidence suggests that young adults might be delaying formal marriage relationships but experimenting with co-habitation (Carlson & Meyer, 2014; Edin & Kafalas, 2005; McLanahan, 2008). In the NLSY97 data, marital status is measured in two ways; in the traditional sense with five categories (0=Single, Married, Separated, Divorced and 4=Widowed), and by examining marriage and marriage-like relationships (cohabitation). As marriage-like relationships have become more common, particularly among the contemporary cohort of young adults (Addo; 2014; Arnett, 2003; 2006), this paper uses the second approach. A Marital Status\_2010 variable is created by categorizing respondents into exclusive marriage and marriage-like relationships. Due to small cell frequencies especially for the exclusive categories of separated, divorced and widowed, these categories were further collapsed into one. The *Revised Marital Status* variable has categories of 1= (separated/divorced/widowed), 2= Married, 3=Cohabiting and 4=Single (never married, not cohabiting). Three dummy variables were created with the Single group as the reference category.

***Parenthood Status.*** The NLSY97 measures children born by a respondent in two ways: One, the number of biological children ever born to the respondent who reside in the household. Two, the number of biological children born but who do not reside in the household. Therefore, a dummy parenthood status in 2010 control was created with 0= no child and 1= at least one child as the reference group.

### **Analysis Plans:**

Data analysis started with a preliminary data screening. Then, bivariate data analysis was conducted to assess whether there was a statistically significant relationship between the

outcome variables and the predictor variables and covariates. The third step involved conducting two types of regressions. Multiple regression was used to assess the relative effects of family capital, educational achievement and educational debt on outstanding debt at age 25 for the young adults. Binary logistic regression was used to assess the relative effect of the predictors (family capital, educational achievement and educational debt), on age 25 homeownership status of the young adults in 2010. SPSS (now PAWS) version 21.0 was used in this analysis.

## **Results**

### **Sample Description**

Characteristics of the final sample used in this study are reported in Table 4.3. The total sample is 2734 young adults between the ages 26 to 29 years with a mean age of 27 years. A little over a half (53%) are female while the rest are male. Almost a quarter (23.7%) identified as Black, a little less than a fifth (18.6%) identified as Hispanic, and the rest identified as Whites (Non-Black/Non-Hispanic). In 2010, about half (48.2%) of the respondents in this sample were single (never married, not cohabiting), 17% were cohabiting, a little over a quarter (28.8%) were married and the rest, about 6%, had experienced a separation, divorce or widowhood. This variable has about 325 cases with missing values. Also in 2010, a majority of our respondents (62.6%) had never had a biological child while the rest had at least one child. When we examine postsecondary schooling, almost half of the youth respondents (47.8%) had a High School Diploma/Certificate of High School Equivalency (commonly known as the GED) or less. About a tenth had an Associate degree. A little over a third (34.5%) had a Bachelor's degree by 2010 and only about 6.8% had a Master's degree or higher. Three hundred twenty eight cases had missing values. As for the educational loans assumed during postsecondary schooling, 5.4% of our young adults had no student loans. About a third (34.8%) of our respondents had outstanding

educational loans of approximately \$5,000 or less. About a quarter (24.1%) had educational loans of between \$5,000 and \$10,000. A little over a fifth had educational loans between \$10,000 and \$20,000, while about 14.2% had educational loans over \$20,000. The average student loan debt was \$10,799 ( $SD = \$12,704$ ), with a median of \$7,000. There was a big problem of cases with missing values, approximately 1383 (50.6%). In 2010, the average family income for our young adult respondents' households was \$66,837 ( $SD = \$53,069$ ). There were 581 cases with missing values. The four Family Capital factors, namely "Family Involvement," "SES," "Social Networks" and "Closeness-to-Parental Figures" had factor score averages of .08 ( $SD = .72$ ), .96 ( $SD = .81$ ), .07 ( $SD = .71$ ) and .03 ( $SD = .64$ ) respectively. The range of scores was very restricted for factors 1, 2 and 3 which might result in challenges in estimating regression models (see table 4.3). At age 25, the average young adult carried other outstanding debt of approximately \$16,530 ( $SD = \$23,088$ ). Median debt was about \$10,650. About 232 cases had missing values. Lastly, only 15.7% ( $n = 403$ ) of our young adults had achieved homeownership. There were 160 cases with missing values on the home ownership variable.

Analysis of missing values revealed that six measures had cases with missing values, with four of these having substantial missing data, namely, the cumulated educational loans variable (50.6%), family income (21.3%), highest degree achieved in 2010 (12%) and 2010 marital status (11.9%). The other two measures, Age-25 debt and Age-25 Homeownership, had missing values of 8.5% and 5.9%, respectively. The rest of the variables had no missing values. An examination of the missing value pattern using Expectation Maximization (EM) method did not show large discrepancies between the original mean values and the estimated (EM) means. EM correlations, with missing values filled in, using EM method showed slight improvements in correlations with new values fitted, especially for variables with large amounts of missing data.

The Little's MCAR test of whether the data were missing completely at random (MCAR) was significant,  $\chi^2(37) = 329.47, p < .05$ , indicating that the data were missing at random (MAR). Therefore, data imputation using EM method was used to replace missing values. Further exploration of data suggested the three quantitative variables with imputed values had problems with skewness, namely cumulated educational loans (4.50), Age-25 debt (4.392) and 2010 family income (2.272). Transformation of the variables to address the skewness and non-normal distributions was conducted. Due to the large positive skewness, base 10 log transformation was used and seemed to work for Age-25 debt to (*Log10\_Age25Debt*). No transformation seemed to work for the 2010 family income variable; therefore the original variable was used. Total cumulated education debt was categorized into the five categories discussed above and reported in table 4.3.

### **Correlates of Outcome Variable Analysis**

Two sets of bivariate analysis were conducted to assess the relationship between the predictor variables with the outcome variables (Log10-Age25 Debt and Age-25 Homeownership Status). The first set of analyses involved assessing the relationship between logged age-25 debt with continuous predictors (see table 4.4) and categorical predictors (see table 4.5). The zero-order Pearson correlations revealed three important things. One, the logged age-25 debt measure had significant but very weak relationship with four of the five continuous predictors (Family Involvement  $r = .06$ , SES  $r = .053$ , Social Networks  $r = .041$ , Family Income 2010  $r = .085$ ). Two, all of the significant relationships were positively correlated with the outcome variable, which was contrary to expectation. It was hypothesized that factors of the latent family capital construct would be negatively correlated with debt. Three, all except one pair of the predictor variables had positive and significant relationships with each other although the strength of the

relationship was mostly weak to very weak. The factor Closeness-to-Parental Figures had no significant relationship with the outcome variable or the Social Network factor (see table 4.4). Logged age-25 debt also had a statistically significant relationship with 10 of the 14 categorical (dummy coded) covariates (see table 4.5). Six of the 10 covariates (sex, dummy-married, all dummies for degree achievement, and dummy educational loan category \$10-20,000) had positive and significant relationships with the logged age-25 outcome variable. However, the strength of these relationships was weak to very weak. The remaining four covariates had negative and significant relationships with our outcome variable, although even here the strength of the relationships ranged from moderate to very weak.

The second set of bivariate analysis involved assessing the relationship between the predictors with age-25 homeownership status. A Spearman's Rho correlation was conducted to assess the relationships between the five quantitative predictors with the outcome variable (see table 4.6). Only 2010 family income had a positive and significant relationship with age-25 homeownership status. All factors of the latent family capital construct were non-significant. This was against expectations and the initially stated hypothesis. To assess the relationship of the age-25 homeownership rates with the categorical predictors, a crosstab descriptive statistics was conducted requesting chi-square statistic of association. All of the categorical covariates were statistically significant (see table 4.7). To be specific, Whites were more likely to report being home owners than Blacks and Hispanic. Women reported higher rates of home ownership than men. Age-25 homeownership status was also higher among those married followed by those who were separated, divorced, or widowed. Those who were single and not cohabiting were least likely to be home owners. As expected, those who had achieved parenthood were more likely to be homeowners compared to those without children. Interestingly, about a fifth of those with

Associates, and slightly less than a fifth (19%) of those with Bachelors, and 17.2% of those with Graduate degree were home owners. Those with a high school degree or less were least likely to be homeowners. Lastly, A little less than a quarter of those with no student loans, and about a fifth of those with student loans of \$10-20,000 were home owners compared to other two groups. Young adults highly indebted with student loans were least likely to be home owners.

To examine the relative effects of the latent family capital construct on age-25 debt holding and age-25 homeownership status when controlling for demographic characteristics, transition to adult milestones, and educational attainment of young adults, two types of regression analysis were conducted: Ordinary Least Squares regression to predict age-25 debt and a Binary Logistic regression to predict age-25 homeownership status.

#### **Multivariate Analysis (Age 25 Debt Holding):**

A sequential multiple regression was performed and predictors entered in the following order: Step 1 included the four factors associated with the latent family capital construct to assess their direct effect on age-25 debt holding. Step 2, included adding demographic controls; race, sex, and family income in 2010 converted in tens of thousands. In Step 3, the two key milestones associated with adulthood that could influence debt levels, namely marital status and parenthood status were entered. The final step (Model 4), added educational attainment, highest degree achieved by 2010, and educational loans outstanding, along with all predictor variables included in previous models. The rationale for this order of entry was in order to examine the full effects of the family capital construct as well as the indirect effects when the selected covariates are accounted for. In addition, the zero-order Pearson  $r$ , part and partial correlations, test of collinearity and a scatter plot for the  $z$ -predicted and  $z$ -residual were requested including the default statistics. Results of this sequential multiple regression are summarized in table 4.8. After

entering all of the 4 sets of predictors, the overall regression model was statistically significant,  $R=.44$ ,  $R^2=.194$ , adjusted  $R^2=.188$ ,  $F=73.903$ ,  $p<.000$ . This suggests that this set of predictors as a whole could explain approximately a fifth (19%) of the total variance in the logged age-25 debt scores accounted for by the regression model.

Since the outcome variable is logged, herein, the coefficients will only be interpreted as the approximate proportional change in the age-25 debt variable associated with a unit change for quantitative predictor variables or moving from one level to the next for categorical predictor variables. Model 1 includes the four factors of the latent family capital construct with the logged age-25 debt. Surprisingly, the regression model at this step was not statistically significant, with  $R^2 = .002$ ,  $F(4, 2729) = 1.05$ ,  $p > .05$ . This finding was surprising as it is against the theorized effects and evidence from the literature (Friedline & Song, 2013; Hibbert et al, 2004; Hillman, 2014; Houle; 2014; Kim & Chatterjee, 2013; Levine & Dean, 2012). Therefore, subsequent model estimation was used to test for a suppressor effect (false indication of no causality) between the distinct dimensions of family capital on logged age-25 debt.

Model 2 included adding the demographic controls to assess the effect of the family capital on logged age-25 debt while also accounting for these covariates. With the addition of the demographic variables, Model 2 was significant with  $R^2 = .026$ ,  $F_{\text{increment}}(4, 2725) = 17.28$ ,  $p < .05$ . Although significant, the logged age-25 debt scores could not be predicted well from the set of family capital factors and demographic predictor variables ( DummyRace\_ Black, DummyRace\_Hispanic, Sex and 2010 Family Income), with only 2.5% of the variance in logged age-25 scores now being accounted for in the model. The four dimensions of family capital factors are still non-significant although SES coefficient is now in the expected direction. When we assess individual predictors, we find that, as is consistent with prior research, race had a

significant relationship with young adults' debt but only for Blacks. Blacks reported holding less debt at age 25 than Whites. Sex also had a significant relationship with logged age-25 debt with males holding more debt at age 25 when compared to females. A unit increase in 2010 family income (converted into \$10,000) had a significant effect on logged age-25 debt of .021 (or \$210). For these sets of predictors, sex had the strongest unique contribution to variance explained at this step (See  $sr^2$  column in table 8). In other words, the amount of variance explained ( $R^2$ ) in this model would reduce by .014 if the sex variable is excluded from the regression equation.

With the addition of the two transition to adulthood milestones, namely marital and parenthood status in 2010 (Model 3 on table 4.8), the overall regression model for this step was also statistically significant,  $R^2 = .040$ ,  $F_{\text{increment}}(4, 2721) = 9.35$ ,  $p < .05$ . Inclusion of the two transition milestones added approximately 1.4% to total variance explained in logged age-25 debt at this step. The family capital factors are still non-significant. The demographic predictors that were significant in Model 2 remain significant. Young adults who are married are more likely to hold debt at age 25 compared to their counterparts who are single and not cohabiting. The dummy variable of those cohabiting when compared to their single counterparts is greater than .05 but less than .10 (trends). The coefficient for the dummy parental status in 2010 is negative, indicating that those without children are less likely to hold debt at age 25 compared to their peers with at least one child. For these sets of predictors in this model, race (being Black) had the strongest unique contribution to variance explained at this step.

Model 4 (the full model) adds controls for educational achievement (highest degree achieved and cumulated educational loans by 2010). The regression model for this step was also statistically significant and it did substantially add to the amount of variance explained,  $R^2 = .194$ ,

$F_{\text{increment}}(7, 2714) = 73.90, p < .05$ . Inclusion of the educational controls improved the proportion of total variance explained in logged age-25 debt by approximately 15.4%.

Several findings are worthy of highlighting: One, the SES factor of family capital reached significance and in the expected direction. A unit increase in scores of the SES factor reduces the scores in logged age-25 debt variable by .154 even when controlling for all other factors in the model. Two, the race measure (being Black) and the parental status in 2010 are no longer significant predictors of logged age-25 debt. Three, being married is positively associated with debt at age 25 when compared to the reference group (single, not cohabiting). Dummy measures for highest degree achieved are significant for those with Associate degrees and Bachelors but not for those with Graduate degrees. Congruent with other research (see, Zhan, 2013), those with associate degrees are more likely to hold other debt at age 25 compared to those with a high school or less level of education (reference group). Similarly, those with Bachelor's degree are more likely to hold debt at age 25 than their high school or less counterparts when all other factors are held constant. Fourth and last, educational loans also significantly predict holding other outstanding debt at age 25. To be specific, those with no student loans are less likely to hold debt at age 25 when compared with those with loans of over \$20,000 (reference group). Similarly, those with student loans of less than \$5,000 and those with student loans of between \$5,000 and \$10,000 were, also, less likely to hold debt at 25 compared to the reference group. Modest educational debt of less than \$5,000 and student debt of between \$5- \$10,000, were the main contributors to variance explained in this step. In contrast, having loans between \$10,000 and \$20,000 does not significantly predict other age-25 debt when compared with those with student loans of over \$20,000.

Since the results in the full model confirms the original suspicion of a suppressor effect with respect to the educational attainment predictors, further analysis were conducted to investigate and identify the suppressor variable. The first set of analysis involved rerunning model 4 with only the educational achievement level dummy predictors (Dummy\_Associates, Dummy\_Bachelors & Dummy\_Graduates). The overall regression model for this analysis was significant,  $R^2 = .065$ ,  $F_{\text{increment}}(3, 2718) = 24.26$ ,  $p < .05$  (results available from author). Inclusion of the educational achievement controls improved the proportion of total variance explained in logged age-25 debt to approximately 2.5%. The SES factor was significant and negatively associated with logged age-25 debt. A unit increase in scores of SES decreased the scores of the logged age-25 variable by  $-.103$ , when controlling for all other factors in the model. All other predictor variables remained the same as in the full model, except for the Dummy\_Graduate variable which reached significance. Being a graduate increased the scores of logged age-25 debt by  $.441$  compared to the reference group (High school or less), while all other factors were controlled.

The second set of investigative analysis involved rerunning model 4 with only the educational loans dummy predictors (Edloans\_Zero, Edloans\_1to5K, Edloans\_5to10K and Edloans\_10-20K). The overall regression model for this analysis was also significant,  $R^2 = .184$ ,  $F_{\text{increment}}(4, 2717) = 119.72$ ,  $p < .05$ . Inclusion of the educational loans controls improved the proportion of total variance explained in logged age-25 debt by approximately 14.4%. Here also, the SES factor was significant and negatively associated with logged age-25 debt. A unit increase in scores of SES decreased the scores of the logged age-25 variable by  $-.113$ , when all other factors were held constant. All other predictors remained the same as results found in the

full model above. Apparently, both sets of educational predictor variables had a suppressor effect but educational loans was the stronger suppressor variable.

In summary, the sequential OLS regression estimation revealed several important findings: One, the main hypothesis of a direct effect of the latent family capital construct was not supported by the data. Two, there seem to be a suppressor effect for the SES factor, particular when we account for educational attainment predictors. This enables us to examine the unique influence of the distinct dimensions of the latent family capital construct on logged age-25 debt. Three, the educational achievement process (highest degree achieved and educational loans) could predict the logged age-25 other debt and in the expected direction. There is also a consistent, positive and significant relationship between sex as well as being married compared to the particular reference groups. Race (being Black compared to White), is a significant predictor of logged age-25 debt and in the expected direction until one accounts for the educational attainment process. Discussion of these findings follows shortly after the presentation of the binary logistic regression.

### **Multivariate Analysis: Age 25 Homeownership**

A sequential binary logistic regression was performed to assess prediction of age 25 home ownership from four sets of select predictors. The predictors were entered in the following order: Step 1 included the four factors associated with the latent family capital construct to examine their direct effect on age-25 home ownership. Step 2 added demographic controls, namely, of race, sex, and family income in 2010. Step 3 added the two key milestones associated with adulthood, that is, 2010 marital and parenthood status. The final step (4<sup>th</sup> model), added two sets of educational attainment predictors, that is, the highest degree achieved by 2010 and 2010 educational loans outstanding. The rationale for this order of entry was to examine the full

effects of the family capital construct on home ownership status as well as the indirect effect with the addition of the control variables. Table 4.9 summarizes the results of the binary logistic regression to predict age-25 home ownership. There was a good model fit for the last three sets of models in this regression analysis, but the base model did not reach significance.

The first model, which only included the four factors of family capital was not significant,  $\chi^2(4) = 2.75$ ,  $p > .05$ , an indication that the set of predictors as a whole could not predict age-25 young adults homeownership. However, an examination of the model fit statistics using the goodness-of-fit test (Hosmer & Lemeshow Test) revealed that the model did fit the data,  $p > .005$ . The strength of the association between home ownership and the family capital predictors was very weak with Nagelkerke  $R^2 = .002$  (2%). An assessment of the individual predictors, the family capital factors, showed that none was significant. This finding was surprising and contrary to the hypothesized relationship. Since the model fitted the data, but could not predict home ownership status, additional models were estimated to examine whether there was a suppressor effect, just as in the analysis of age-25 debt.

The second model added the demographic predictors, namely, race, sex, family income in 2010 and other outstanding debt at age-25. With the inclusion of the demographic controls, the regression model was statistically significant,  $\chi^2(4) = 60.68$ ,  $p < .05$ , an indication that that the set of predictor could predict age-25 home ownership status. Further evaluation of model fit using the goodness-of-fit test indicated that the model did fit the data well,  $p > .005$ . However, an examination of the strength of the association between home ownership and our predictors at this step suggested there was a very weak association of the predictors and the outcome variable, with Nagelkerke  $R^2 = 4\%$ . Since the overall model using the omnibus test was significant we assessed the relationship of each predictor with the outcome variable. All of the family capital

factors were still non-significant but, two of the factors, SES and Social Network's coefficient were now negative. Again, this was against hypothesized relationship and the direction of the two factors was also against expectation. Three of the five demographic predictor variables, namely race, sex and logged age-25 debt, were significantly associated with age- 25 home ownership. Those who reported being White were 2.21 times more likely to be home owners than their Black counterparts. There was no effect for being Hispanic but it was less than .10 (trending). Gender was significantly associated with homeownership, with females about 1.26 times more likely to be home owners compared to their male peers. This was interesting and unexpected. 2010 family income was only statistically significant at the  $p < .10$  level. Also interesting was the finding that holding other debt at age 25 was positively associated with age-25 home ownership status. A unit increase in logged age-25 debt increased the odds of home ownership by about 13%. The conventional assumption is that presence of other debt may constraint one's ability to secure mortgage financing. On the other hand, modest consumer debt may reflect credit worthiness.

There was a great improvement in model fitting information with the addition of transition to adulthood milestones, namely 2010 marital and parental status (Model 3). Overall, the model was statistically significant,  $\chi^2(13) = 281.26, p < .05$ . The goodness of fit test (Hosmer & Lemeshow Test) was non-significant, an indication the model adequately fit the data. There was an improvement in predicting home ownership with Nagelkerke  $R^2 = 17.8\%$ . Several important things are worth noting. One, the coefficient of SES factor of the latent family capital construct become positive. Factor of Family involvement become negative. All the family capital factors are still non-significant. Two, race is still significant but only for Blacks. Whites are still twice as likely (1.84 times) to be home owners compared to their Blacks peers. Three, the effect

for gender disappeared. Four, there is a strong, positive and significant effect of marriage-like relationship on home ownership when you compare young adults who are single (never, married, not cohabiting) with their peers who have cohabited, married or experienced some other marital status. To be specific, those cohabiting are 76% more likely to be home owners than their young adult counterparts who are single and not cohabiting. Those who are married are over 5.3 times more likely to be home owners than their single counterparts. Those who had experienced separation, divorce or widowhood are about 2.6 times more likely to be home owners than the reference group (single adults). This was a surprising finding particularly for those cohabiting as the anticipation was that they would be more similar to the reference group. As expected, parental status has a positive and significant relationship with home ownership. Young adults who are parents are 58% (1.58 times) more likely to be homeowners than their counterparts who do not have a child.

With the addition of educational attainment variables, namely highest degree achieved and cumulated educational loans in 2010 (the full model), the regression model was still statistically significant,  $\chi^2(20) = 296.32$ ,  $p < .05$ . An assessment of the goodness-of-fit statistics using the Hosmer and Lemeshow test suggested the model fitted the data well,  $p > .05$ . That said, with the addition of the educational controls, there was a slight increase (less than 1%) change of the association between predictors with age-25 home ownership, Nagelkerke  $R^2 = 18.7\%$ . When looking at the individual predictors, the significant effects in the previous model held steady and in the expected direction except for other outstanding (logged age-25) debt, which lost significance but was less than  $p < .10$ . A suppressor effect was not identified for the family capital factors on home ownership as was the case with young adult debt holding.

Two, indicators of highest degree ever achieved have a positive and significant relationship with home ownership. Specifically, those with Bachelors are 1.48 times more likely to be home owners than their peers with no post-secondary education. Surprisingly, being a Graduate or having an Associate degree have no significant effect compared to the reference group (those with only a high school degree or less). The effect of educational loans on home ownership status at age 25 was interesting. As expected, those with no student loans are 2.7 times more likely to be home owners than those with loans of over \$20,000. There is no statistically significant effect for holding modest educational debt (that is having loans less than \$5,000 or loans between \$5,000 and \$10,000) on home ownership when compared to the most indebted group. However, those with loans of between \$10,000 and \$20,000 are 1.79 times (80%) more likely to be home owners than their peers with student loans of over \$20,000. This is a new and interesting finding in the literature.

### **Discussion & Implication for Research**

The results of this study adds to the gradually expanding literature on natal families' influence on young adults as they transition into adulthood. These findings contribute new knowledge about the economic well-being of young adults in contemporary society. This study's primary goal was to examine the crucial role that natal families are playing in the lives of young adults as they transition into various adult destinations. The study hypothesized that contemporary families are using their stock of capital to bolster their young adults' economic well-being, particularly with avoidance of debt and accumulation of assets (home ownership). The study also hypothesized that the effect of family capital on age 25 debt and home ownership would be significant even when we account for demographic characteristics, transition to

adulthood milestones and educational achievement. The following is a discussion of findings for both analyses. I begin with a discussion on age-25 debt and then age-25 home ownership.

### **Age-25 Debt Holding**

Although ample research suggests that there are differences in debt holding between disadvantaged and advantaged young adults and these differences could be due to the instrumental support that advantaged young adults get from their natal families, the main hypothesis for this study was not supported by the data. The four factors (together) did not significantly predict age 25 debt holding of young adults. Only SES factor could predict debt holding at age-25 and in the expected direction when educational attainment factors were taken into account. A unit increase in SES scores predicted lower levels of debt at age-25. This finding adds to the literature but it is an old story and only confirms what is already established in the literature (Chiteji, 2007; Draut, 2005; Draut & Silva, 2004; Hillman, 2014; Houle, 2014; Kim & Chittarjee, 2013). With careful examination of this finding, perhaps lack of support was largely due to the measures employed especially for family processes. It might be that family capital and deployment of that capital during transitions to adulthood is very different from what it is during adolescence. For instance, family capital marshalled and deployed during adolescence may be more geared towards positive social, emotional and psychological development (most of the measures used in this study) rather than socialization geared toward the development of economic prowess. Perhaps employing measures such as whether parents monitored the youth's financial spending, educated them on money matters helped them open bank accounts as children or simply modeled prudent financial behavior (Hillman, 2014; Kim & Chatterjee, 2013; Lursadi et al., 2010) would have resulted in better estimation of what families actually do rather than simply employing measures in adolescence that could have promoted positive youth

development. That said, employing these measures was an attempt to adhere to the theoretical propositions of Bourdieu (1986) regarding the types of capital and processes that families invest in their children. Although these measures worked well in other domains of life such as human capital development, it seems more research is needed to develop measures that could be applied across multiple domains of life outcomes such as the SES factor, including assessment of indirect effect through other factors salient during young adulthood.

An interesting but expected finding was the role of education predictors in debt holding at age 25. That is, education predictors were the main drivers in predicting debt at age-25. However, and as expected, as people stay in school longer, the more likely they may be at risk of assuming other types of debt such as credit cards, auto loans, other installment loans including student loans (Chiteji, 2007; Fry, 2014; Taylor et al., 2012). A little surprising, though, was the finding that being a graduate did not significantly predict age-25 debt ownership when compared to the reference group (high school graduate or less). As stated above, one might think that the more schooling one gets, the longer one takes to become economically independent and the higher the likelihood that one would assume additional debt. Since this outcome variable excluded student loans as well as mortgage debt, it could simply be that graduates finance their semi-independent status financially in other ways such as more reliance on student loans and less assumption of other types of debt at this early stage in the life course. It may also be that other factors are more salient that we have not yet considered. For instance, most graduate programs do offer the flexibility of studying full-time or part-time (extended degrees) and therefore many students are able to go to school and hold some kind of job. In addition, many graduate programs offer some kind of assistance, say grants, scholarships and assistantships that help young graduates avoid getting into debt in these early years of adulthood. More research to disentangle

the myriad of factors that were not fully considered in this study would help shed some light into this interesting finding.

Findings for the effect of student loans were also in line with the literature and expected (Brown & Caldwell, 2013; Fry, 2014). Student loans were negatively related to age-25 debt holding. It appears that young adults who are savvy enough to get post-secondary schooling without loans or with modest education debt are significantly more likely to avoid other types of debts compared to their peers who have a lot of student debt. It also appears that when student loans reach a certain threshold, their effect on debt avoidance behaviors diminishes and do not significantly affect debt holding. So, it may be that the anxiety associated with having a loan that will have to be paid back diminishes as level of student debt goes up and hence student debtors are more likely to assume other forms of debt. It would be interesting for future research to further investigate this finding as well as help shed more light on the types of debts student debtors are likely to assume because at the present, we only know of a negative relationship at the lower end of the distribution that disappears as student debt level increases.

Last, an interesting and new finding that has not been featured in the literature is the positive and consistent association of marriage on age-25 debt even when other factors are controlled for. To my knowledge, existing research has not interrogated this question. We know that indebtedness is part and parcel of the American household life (Montgomerie, 2013). However, most research shows that the most indebted households are those whose head of household is in the middle adulthood (usually 35-55) (Bricker et al., 2012). At age-25, we did not anticipate to find such a consistent and significant finding. Could indebtedness of American households be starting much earlier than we had anticipated or is the financial behavior of young adults who are married different from the rest of their peers? At such a young age and even

taking into consideration certain financial obligations that come with legally getting married such as underwriting weddings or establishing a new home as a new couple, the consistent indebtedness of the married young adults was a bit shocking and may warrant more careful interrogation.

### **Age-25 Home Ownership**

Once again, although ample research exists that shows family background does influence the home ownership rate of young adults (Caputo, 2003; Conley, 1999; Keister, 2005), the latent family capital construct could not predict age-25 home ownership status of the respondents. As stated earlier, the lack of findings of a significant effect could be a result of the measures used as well as the timing of the event, and also the possibility that the predicted positive effects of family capital on home ownership are mediated through educational attainment and its very robust relationship with home ownership. Some financial management measures used by scholars examine if young adults received allowances, had savings accounts as children or whether their financial spending was monitored by parents (Kim & Chatterjee, 2013), may be more relevant forms of family capital than the measures employed in this study. Future utilization of these measures would be welcome. Also, at age-25, most young people are just finishing college and have not really become financially independent to pursue home ownership. Therefore, examining home ownership status at a later age, say age 29-34, may perhaps shed a better picture of the true effect of family capital.

That said, two interesting findings are worth mentioning: One, transition to adulthood milestones predictors had the strongest effect on home ownership status. In particular, parental status was the main driver. Though the finding was expected as research has already established that becoming a parent not only influences the establishment of an independent home but also

influences people to seriously start thinking strategically about long-term goals including home ownership, this finding helps us make a connection between transition to adulthood milestone and asset accumulation – a unique contribution to the literature.

The second thing worth noting is the positive effect of student loans on age-25 home ownership status. While it is not surprising to find that non-student debtors are more likely to be home owners than student debtors, the finding that those with debts of between \$10,000 and \$20,000 are significantly more likely to be home owners than their peers with loans over \$20,000 is a unique finding. There is a lot of public discussion about the negative effects of student loans on other life outcomes of young adults (Business Week, 2005; Chiteji, 2007; Draut & Silva, 2004; Fetterman & Hansen, 2006; Friedman & Song, 2013; Fry, 2014; Houle, 2014; Kamenetz, 2006; Levine & Dean, 2012; Taylor et al., 2012). In fact, some have argued that student loans do negatively impact home ownership of young adults (Emmons & Noeth, 2014). Still others say that student loans debtors have lower credit scores than non-student debtors (Brown & Caldwell, 2013). Furthermore, with the Great Recession, the anticipation was that student loans will negatively be associated with home ownership especially with higher debt levels. There could be several processes influencing this unexpected finding; one at the individual level and the other one at the institutional level, especially in the housing sector.

At the individual level, those with modest student loans (\$10,000 or less) may actually make a strategic decision to delay home ownership in the hope that they will quickly pay down their student debt and then embark on their asset accumulation process. On the other hand, those with moderate loans of \$10-20,000 may realize that it may take them a while to pay down their student debt, and therefore, they are more strategically deciding to assume mortgage debt which is also long-term instead of having an extended period of renting. They could, also, just be more

confident in assuming additional long-term financial obligations. Since home buying is generally a prolonged process that entails a careful review of financial information, financial institutions policies or agents may also be influencing home ownership of student debtors. For example, as mortgage rates are determined by evaluation of potential home buyers income to debt ratio; young adults with modest student debt could be encouraged by institutional agents to delay their home buying process so as to pay down debt, build up credit to qualify for better rates and/or larger loans. This is especially so if these goals could be achieved in a relatively short duration. Also, institutions may be more willing to extend mortgage credit to those with moderate loans (\$10-20,000) instead of shunning them or denying them loans as their indebtedness cannot be substantially altered in the short-term. At the moment, it is not possible to exactly tell which process is taking place and therefore, more research is warranted.

Beyond the measurement issue of the latent family capital construct discussed throughout the paper, there are three more limitations to this study that are worth highlighting. One, the age-25 debt variable used the aggregate value of other debt (excluding mortgage and student loans). This measure is not ideal and does not capture the variations in types of debt assumed by young adults. It would have been good to disaggregate them to examine different types of debt such as installment loans, credit card and auto loans and see the proportion of each type of debt held by a young adult as well as their relationship with factors that make up the latent family capital construct. Two, some predictor variables did not have strong linear relationship with age-25 debt outcome, and no amount of addressing the issue, including using transformation of variables helped. Addressing this issue could have improved the strength of the association and prediction on the outcome variables. Also, the restricted ranges of scores in the family capital factors could be an issue worth investigating. Last, since homeownership was just based on type of housing,

maybe it would have been better to also look at the value of their outstanding mortgage to help differentiate not only home owners versus non-homeowners but also home owners with a lot of mortgage debt versus those with little mortgages, as well as controlling for geographical variations of the housing markets. Perhaps these limitations would be addressed better with another replication of this study focusing on age-30 young adults' home ownership outcomes.

## References

- Addo, F. R. (2014). Debt, Cohabitation, and Marriage in Young Adulthood. *Demography*, 51, 5, 1677-1701.
- Aizcorbe, A., Kennickell, A., & Moore, K. (January 2003). Recent changes in U.S. family finances: Evidence from the 1998 and 2001 Survey of Consumer Finances *Federal Reserve Bulletin*, 89, 1-32.
- Arnett, J. (2001). Conceptions of the transition to adulthood. Perspectives from adolescence through midlife. *Journal of Adult Development*, 8, 133-143.
- Arnett, J. (2000). Emerging adulthood: A theory of development from late teens through the twenties. *American Psychologist*, 55, 469-480.
- Aronson, P. (2008). Breaking barriers or locked out? Class-based perceptions and experiences of postsecondary education. In J. T. Mortimer (Ed.), *Social class and transitions to adulthood. New Directions for Child and Adolescent Development*, 119, pp. 41–54.
- Bartholomew, D., Steele, F., Moustaki, I. & Galbraith, J. (2008). *Analysis of multivariate social science data*. Boca Raton, LA: CRC.
- Becker, G. (1993). Nobel lecture: The economic way of looking at behavior. *Journal of Political Economy*, 101, 385-409.
- Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, 4, 1–39.
- Bell, L., Burtless, G., Gornick, J. and Smeeding, T. (2006). A cross-national survey of trends in the transition to economic independence. *Research Network Working Paper*, Network on Transitions to Adulthood.
- Berlin, G., Furstenberg, F. & Waters, M. (2010). Introduction the [Special] Issue. *The Future of Children*, 20 (1), p. 3-18.
- Berzin, S. C., & De, M. A. C. (2010). Understanding the Impact of Poverty on Critical Events in Emerging Adulthood. *Youth & Society*, 42, (2), p. 278- 300.
- Boehm, T. P., & Schlottmann, A. M. (1999). Does home ownership by parents have an economic impact on their children? *Journal of Housing Economics*, 8(3), 217-232.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, Mass: Harvard University Press.

- Bourdieu, P. (1986). The Forms of Capital. In John Richardson (ed.). *Handbook of theory and research for the sociology of education*. New York: Greenwood Press, p. 241-258.
- Bricker, J., Kennickell, A., Kevin B. Moore, Kevin, B. & Sabelhaus, J. (2012). Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances, *Federal Reserve Bulletin*, Vol. 98 (2), pp. 1-80.
- Brown, Meta and Sydnee Caldwell. 2013. Young Adult Student Loan Borrowers Retreat from Housing and Auto Markets. *Federal Reserve Bank of New York*, New York.
- Bucks, B., Kennickell, A., Mach, T., & Moore, K. (February 2009). Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, vol. 95, pp. A1-A55.
- Bucks, B., Kennickell, A., & Moore, K. (February 2006). Recent Changes in U.S. Family Finances: Evidence from the 2001 and 2004 Survey of Consumer Finances *Federal Reserve Bulletin*, vol. 92, pp. A1-A38.
- Business Week (November, 14, 2005). Thirty and Broke. The real price of a college education today. *Business Week Special Report*. Retrieved May 9<sup>th</sup> 2009 from [http://www.businessweek.com/magazine/content/05\\_46/b3959107.htm](http://www.businessweek.com/magazine/content/05_46/b3959107.htm)
- Callis, R. & Kresin, M. (2013). Residential Vacancies and Homeownership in the Fourth Quarter 2013. U.S. Census Bureau News, CB14-09. Found at <http://www.census.gov/housing/hvs/files/qtr413/q413press.pdf>
- Caputo, R. (2003). Assets and economic mobility in a youth cohort, 1885-1997. *Families in Societies*, 84 (1), 51-62.
- Carlson, M. & Meyer, D. (2014). Family Complexity: Setting the Context. *The ANNALS of the American Academy of Political and Social Science*, 654 (no. 1), pp 6-11 - at: DOI: 10.1177/0002716214531378.
- Chiteji, N. (2007). To have and to hold: An analysis of young adult debt. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Chiteji, N. S., & Stafford, F. P. (1999). Portfolio choices of parents and their children as young adults: Asset accumulation by African-American families. *The American Economic Review*, 89(2), 377-380.

- Conley, 2001: Capital for College: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59-72.
- Danziger, S & Rouse, C. (2007). Introduction. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation
- Draut, T. (2005). *Strapped: Why America's 20- and 30-somethings can't get ahead*. New York: Doubleday.
- Draut, T. & Silva, J. (2004). Generation broke: The growth of debt among young Americans. *Borrowing to Make Ends Meet Briefing paper # 2*, October, 2004 at [www.demos.usa.org](http://www.demos.usa.org)
- Edin, K. & Kefalas, M. 2005. *Promises I can keep: Why poor women put motherhood before marriage*. Univ. of California Press.
- Emmons, W. & Noeth, B. (2014). Housing Crash Continues to Overshadow Young Families' Balance Sheet. Federal Reserve Bank of St. Louis, *In the Balance: Perspectives on Household Balance Sheets*, Issue 7.
- Farber, H. (2007), Is the company man an anachronism? Trends in long-term employment in the United States, 1973 to 2006. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Fetterman, M. & Hansen, B. (November 22, 2006). Young people struggle to deal with a kiss of debt. *USA Today*. Retrieved May 9<sup>th</sup> 2009 from [http://www.usatoday.com/money/perfi/credit/2006-11-19-young-and-in-debt-cover\\_x.htm](http://www.usatoday.com/money/perfi/credit/2006-11-19-young-and-in-debt-cover_x.htm) .
- Friedline, T. & Song, H. (2013). Accumulating assets, debts in young adulthood: Children as potential future investors. *Children and Youth Services Review*, 35 ( ), pp 1486-1502
- Fry, R.. 2014. *Young Adults, Student Debt and Economic Well-being*. Washington, D.C: Pew Research Center's Social and Demographic Trends project, May.
- Furstenberg, F. (2010). On a New Schedule: Transitions to Adulthood and Family Change. *The Future of Children*, 20 (1), p. 67-87.
- Furstenberg, F., Rumbaut, R., & Settersten, R. (2005). On the frontier of adulthood: Emerging themes and new direction. In In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.

- Gregory, L. & Drakeford, M. (2006). Social Work, Asset-based welfare and the Child Trust Fund. *British Journal of Social Work*, 36, 149-157.
- Green, R. & White, M. (1997). Measuring the effects of home ownership: Effects on children. *Journal of Urban Economics*, 41 (3), pp. 441-461.
- Guldi, M., Page, M. and Stevens, A. (2007). Family background and children's transitions to adulthood over time. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Haveman, R., & Wolff, E. (2004). The concept and measurement of asset poverty. *Journal of Economic Inequality*, Vol 2 () p. 145-169.
- Heflin, C. (2008). *Material Hardship and Macroeconomic Performance across Space, Time and Race*. Paper presented on March 9 2009 at the West Coast Poverty Center Seminar Series, University of Washington.
- Hibbert, J. R., Beutler, I. F., & Martin, T. M. (2004). Financial Prudence and Next Generation Financial Strain. *Journal of Financial Counseling & Planning*, 15(2), 51-59.
- Hill, C. and Holzer, H. (2007). Labor market experiences and the transition to adulthood. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- Hillman, N. (2014). College on Credit: A Multilevel Analysis of Student Loan Default. *The Review of Higher Education*, 37 (2), pp. 169-195.
- Hirschl, T. A., & Rank, M. R. (2010). Homeownership across the American life course: Estimating the racial divide. *Race and Social Problems*, 2 (3-4), pp. 125-136.
- Houle, Jason N. 2014. "Disparities in Debt: Parents Socioeconomic Resources and Young Adult Student Loan Debt." *Sociology of Education*.
- Houle, Jason. 2014. "A Generation Indebted: Young Adult Debt across Three Cohorts" Forthcoming, *Social Problems*.
- Kamenetz, A. (2006). *Generation debt: Why now is a terrible time to be young*. New York: Riverhead Books.
- Kennickell, A., Starr-McCluer, M., & Surette, B. (January 2000). Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances. *Federal Reserve Bulletin*, vol. 86, pp. 1-29.

- Kiely, R. (2007). *The new political economy of development: globalization, imperialism and hegemony*. Palgrave Macmillan.
- Kim, J. & Chartterjee, S. (2013). Childhood Financial Socialization and Young adults Financial Mangement. *Journal of Financial Counseling and Planning*, 24(1), pp. 61-79.
- Lareau, A. (2003). *Unequal childhoods: Class race and family life*. Los Angeles: Unversity of California Press.
- Lareau, A., & Weininger, E. (2008). Class and the transition to adulthood. In A. Lareau and D. Conley (eds). *Social class? How does it work?* New York Russell Sage Foundation.
- Lusardi, A. Mitchell, O. & Curto, V. (2010). Financial literacy among the young. *Journal of consumer affairs*, 44, 2, 358-380.
- Levy, H. (2007). Health insurance and the transition to adulthood. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.
- McLanahan, S. 2008. Fragile families and the reproduction of poverty. *Fragile Families Working paper*, Princeton University. <http://crcw.princeton.edu/workingpapers/WP08-04-FF.pdf>
- Minicozzii, A. (2005). The short term effect of educational debt on Job decisions. *Journal of Educational Review* 24 (X), pp 417- 430.
- Montgomerie, J. America's Debt Safety-Net. *Public Administration*, 91(4), pp. 871-888.
- O' Shaughnessy, L (May 23, 2008). Debt-squeezed Gen X saves little. *USA Today*. Retrieved on May 9<sup>th</sup> 2009 from [http://www.usatoday.com/money/perfi/retirement/2008-05-19-generation-x-retirement\\_N.htm](http://www.usatoday.com/money/perfi/retirement/2008-05-19-generation-x-retirement_N.htm)
- Rothstein, J. & Rouse, C. (2011). Constrained after college: Student loans and early-career occupational choices. *Journal of Public Economic*, 95, pp. 149-163.
- Scholte, Jan Aart (2005). The courses of neoliberal globalization. United Nations Research Institute for Social Development. [www.globalpolicy.org/globaliz/define/2005/10scholte.pdf](http://www.globalpolicy.org/globaliz/define/2005/10scholte.pdf)
- Settersten, R. A., & Ray, B. (2010). *Not quite adults: Why 20-somethings are choosing a slower path to adulthood, and why it's good for everyone*. New York: Bantam Books Trade Paperbacks.
- Settersten, R. and Ray, B. (2010b). What's Going on with Young People Today? The Long and Twisting Path to Adulthood. *The Future of Children*, 20 (1), p. 19-41.

- Shanks, T., Kim, Y., Loke, V. & Destin, M. (2009). Assets and Child Well-Being in Developed Countries. CSD Working Papers, No. 09-66.
- Sherraden, M (2003). Assets and public policy. In M. Sherraden (Ed.), *Inclusion in the American Dream: Assets, Poverty and public policy*. New York: Oxford University Press (pp 3-19).
- Sherraden, M. (1991). *Assets and the Poor: A New American Welfare Policy*. Armonk, NY: M.E. Sharpe.
- Schoeni, R. & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Stiglitz, Joseph (2003). The freedom to choose? *Globalization and its discontents* (pp 53-88). New York: W.W.Norton.
- Swartz, T. T. (2008). Family capital and the invisible transfer of privilege: Intergenerational support and social class in early adulthood. *New Directions in Child and Adolescent Development*, 119(Spring), p. 11-24.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson and Allyn & Bacon.
- Taylor, P., Parker, K., Kochhar, R., Fry, R., Funk, C., Patten, E., & Motel, S. (2012). Young, underemployed and optimistic: Coming of age, slowly, in a tough economy. Washington, DC: Pew Research Center, Pew Social & Demographic Trends. Retrieved from <http://www.pewsocialtrends.org/files/2012/02/SDT-Youth-and-Economy.pdf>
- Weininger, E. (2005). Foundations of Pierre Bourdieu's class analysis. In E. O. Wright (Ed.). *Approaches to class analysis*. Cambridge, UK: Cambridge University Press.

**Table 4.1 1995-2010 Proportion of Debt Holding for Young Adult Households (< 35 years)**

Years	Any Debt	Credit Cards	Installment Loans	Debt Burden
1995	83.5	54.7	62.5	8.7
1998	81.2	50.7	60.0	11.1
2001	82.7	49.6	63.8	11.9
2004	79.8	47.5	59.4	13.7
2007	83.5	48.5	65.2	9.4
2010	77.8	38.7	61.9	10.4

*Source* : Federal Reserve Bulletin(s) Vol 86, 89, 92, 95, 98

*Note* : Debt burden is defined as having debt that is 60 days past due

**Table 4.2 Measures of Examining Effect of Family Capital and Educational Attainment Process on Financial Well-being and Transition to Adulthood Milestones**

<b>Construct</b>	<b>Indicators</b>	<b>Scale of Measurement</b>
<b>Dependent Variables</b>		
	Debt at Age 25	Ratio Scale
	Homeownership at 25	Dummy coded (0=No Homeowner, 1=Homeowner)
<b>Independent Variables</b>		
	<b>Family Capital</b>	
	F1: Parental Involment	Ratio Scale
	F2: Socioeconomic Status	
	F3: Social Network	
	F4: Closeness to Parental Figures	
	<b>Educational Achievement</b>	Ordinal Scale:
	Highest Degree Ever Achieved 2010 (CV_Highest_Degree_Ever_EDT_2010)	(0=None, 1=GED, 2=HS to 5=Masters, 6=PhD & Professional Degree (DDS, JD, MD)
	<b>Education Debt</b>	Ordinal
	Total Education Loans Owed 2003 - 2010 (FinalCumEduLoans2003-2010)	(0=no Outstanding Debt, 1=\$1 to 5K, 2=\$5,001 to 10K, 3=\$10,001 to 20K, 4=\$20,001 to 127K)
<b>Covariates</b>		
	Race	Nominal (1=Blacks, 2= Hispanic/Latino, 3= White)
	Sex	(1=Male, 2=Female)
	Family Income_2010	Scale
	Marital Status	Nominal (1={Separated, Divorced Widowed}, 2=Married, 3=Cohabiting, 4=Never Married & No Cohabiting )
	Parenthood Status 2003	Nominal (0= No child, 1= At least one Child)

**Table 4.3: Sample demographics (N=2734)**

Variable	Categories	Frequency	%
Sex	Male	1274	46.6
	Female	1460	53.4
Race/Ethnicity	Blacks	649	23.7
	Hispanic	508	18.6
	Whites	1577	57.7
Rev Marital Status	Single (Never married, no cohabiting)	1161	48.2
	Cohabiting	410	17
	Married	693	28.8
	Others (Separated/Divorced/Widowed)	145	6.0
Parenthood Status 2010	No Child	1711	62.6
	At least one bio child	1023	37.4
Highest Education Achieved	High School/GED or Less	1151	47.8
	Associate	261	10.8
	Bachelors	831	34.5
	Graduates (Masters, PhDs & Professional Degrees)	163	6.8
Total Education Loans Owed 2003 - 2010 (FinalCumEduLoans2003-2010)	No Debt	73	5.4
	\$1 to 5k	470	34.8
	\$5001 to 10k	326	24.1
	\$10,001 to 20k	290	21.5
	\$20,001 to 127K	192	14.2

Quantitative Predictors		<i>M</i>	<i>SD</i>
Age		27.05	(0.8)
	Median	27	
	Range	25.75 - 28.58	
Family Income 2010		\$66,837.92	53,068.99
	Median	\$59,036.40	
	Range	0 to \$290,810	
Family Capital - Mean ( <i>SD</i> )			
	F1: Parental Involment	0.854	(0.72)
	Median	0.09	
	Range	-3.34 to 2.40	
	F2: Socioeconomic Status	0.959	(0.81)
	Median	0.05	
	Range	-2.78 to 15.78	
	F3: Social Network	0.0657	(0.71)
	Median	0.028	
	Range	-1.20 to 2.58	
	F4: Closeness to Parental Figures	0.029	(0.64)
	Median	0.06	
	Range	-1.93 to 1.09	
Cumulated Educational Loans 2003-2010		\$10,799.70	(\$12,704.12)
	Median	\$7,000	
	Range	\$0 to \$127,000	
<b>Dependent Variables</b>			
Logged Age-25 Debt		3.14	1.68
	Median	3.87	
	Range	0	5.5
Age25 Debt		\$16,530.22	\$23,088.01
	Median	\$10,650	
	Range	\$0.00	\$350,000.00
Age-25 Homeownership Status	Does Not Own	2171	84.3
	Owns	403	15.7

Table 4.4: Zero ordered correlations of Logged Age-25 Debt and Quantitative Predictors (N=2734)

	M	SD	Log10Age25 Debt	FAC1_Family Involvement	FAC2_Socio Economic Status	FAC3_Socia l Networks	FAC4_Close ness-to- Parental Figures	Family Income 2010
Log10Age25Debt	3.1384	1.67964	1.000					
FAC1_Family Involvement	.0854	.72140	.060**	1				
FAC2_SocioEconomic Status	.0959	.81312	.053**	.226**	1			
FAC3_Social Networks	.0657	.70769	.041*	.168**	.238**	1		
FAC4_Closeness-to-Parental Figures	.0288	.64443	.029	.443**	.326**	-.013	1	
Family Income 2010	66837.92	53068.994	.085**	.076**	.128**	.046*	.070**	1

+p &lt; .10; \*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

Table 4.5: Spearman's Rho correlations of Logged Age-25 Debt and Categorical Predictors (N=2734)

	Log10_Age25Debt	Log10_Age25Debt	e25Debt	e_Black	Hispanic	Sex	DummyMar	DummyMarried	DummyOthers	ParentStat	EduDummy_AA	EduDummy_Bachelors	EduDummy_Graduates	EduLoans_Zero	EduLoans_1to5K	EduLoans_5to10K	EduLoans_10to20K		
Spearman's rho	1.000																		
DummyRace_Black	-.079**	1.000																	
DummyRace_Hispanic	-.005	-.267**	1.000																
Sex	.117**	.078**	.013	1.000															
DummyMarStatus_Cohabiting	.023	-.025	-.003	.023	1.000														
DummyMarStatus_Married	.162**	-.155**	.037	.035	-.245**	1.000													
DummyMarStatus_Others	-.018	.025	.030	.035	-.099**	-.138**	1.000												
ParentStatus2_2010	-.007	.187**	.056**	.150**	.037	.330**	.134**	1.000											
EduDummy_AA	.044*	.009	.011	-.013	-.028	.065**	.056**	.057**	1.000										
EduDummy_Bachelors	.227**	-.144**	-.064**	.037	.028	.085**	-.089**	-.177**	1.000										
EduDummy_Graduates	.102**	-.024	-.065**	.062**	-.019	.052**	-.011	-.109**	-.082**	1.000									
EduLoans_Zero Dummy	-.072**	.020	.026	-.032	.019	.023	-.009	.036	.016	-.050**	1.000								
EduLoans_1to5K Dummy	-.166**	.108**	.012	-.021	-.005	-.002	.020	.066**	-.007	-.076**	-.029	1.000							
EduLoans_5to10K Dummy	-.277**	-.052**	-.009	-.046*	-.024	-.049*	-.007	-.036	-.039*	-.057**	-.018	-.093**	1.000						
EduLoans_10to20K Dummy	.384**	-.046*	-.005	.068**	-.008	.061**	.006	-.012	.040*	.091**	.053**	-.078**	-.265**	1.000					

+p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001

**Table 4.6: Spearman's Rho Correlations of Age-25 Homeownership and Quantitative Predictors (N=2734)**

	Age25Home Ownership	FAC1_Family Involvement	FAC2_Socio Economic Status	FAC3_Social Networks	FAC4_Close ness-to- Parental	Family Income 2010
Spearman's rho	1.000					
Age25HomeOwnership		1.000				
FAC1_Family Involvement	.032		1.000			
FAC2_SocioEconomic Status	.035	.269**		1.000		
FAC3_Social Networks	.001	.178**	.290**		1.000	
FAC4_Closeness-to-Parental	.018	.462**	.365**	-.015		1.000
Family Income 2010	.161**	.093**	.179**	.060**	.083**	1.000

+p &lt; .10; \*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

**Table 4.7: Age 25 Homeownership Status 2010 by Covariates (Percentages & Chi-Square Statistics)**

<b>Variable</b>	<b>N</b>	<b>%</b>	<b><math>\chi^2</math></b>
<b>Race</b>			
Black	55	8.8	33.27***
Hispanic	73	15.2	
White	275	18.8	
<b>Sex</b>			
Male	169	14.1	4.35*
Female	234	17.1	
<b>Marital Status</b>			
Single (Never Married, No Cohabiting)	67	5.8	267.18***
Cohabiting	52	12.7	
Married	237	34.2	
Seperated	13	17.6	
Divorced	13	18.3	
<b>Parenthood Status 2010</b>			
No Child	172	11.0	66.13***
At least one Child	231	22.9	
<b>Highest Educational Level</b>			
High School and less	145	12.6	18.37***
Associate	53	20.3	
Bachelors	156	18.8	
Graduates (Masters, PhD & Profes	28	17.2	
<b>Outstanding Educational Loans 2010</b>			
No Debt	16	23.9	15.78**
\$1 to 5k	90	14.4	
\$5001 to 10k	177	14.6	
\$10,001 to 20k	97	20.5	
\$20,001 to 127K	23	11.7	

+p &lt; .10; \*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

Table 4.8: Summary of Multiple Regression Models predicting logged Age-25 Outstanding Debt (N=2734)

	Model 1			Model 2			Model 3			Model 4		
	B	SE	sr <sup>2</sup>	B	SE	sr <sup>2</sup>	B	SE	sr <sup>2</sup>	B	SE	sr <sup>2</sup>
<b>Family Capital</b>												
Constant	3.130***	0.033	0.001	2.457***	.114	0.000	2.367***	.116	0.000	3.511***	.155	0.000
F1: Parental Involvement	0.062	0.051	0.000	0.042	0.050	0.000	0.028	0.050	0.000	-.016	.046	0.000
F2: Socioeconomic Status	0.000	0.043	0.000	-0.027	0.047	0.000	-0.033	0.047	0.000	-.154***	.044	0.004
F3: Social Network	0.063	0.048	0.001	0.075	0.047	0.001	0.067	0.047	0.001	.007	.043	0.000
F4: Closeness to Parental Figures	-0.021	0.058	0.000	-0.020	0.058	0.000	-0.026	0.057	0.000	.038	.053	0.000
<b>Demographics (White &amp; Females ref groups)</b>												
DimnyRace_Black				-.298***	.081	0.005	-.178*	.0084	.0016	-.092	.078	0.000
DimnyRace_Hispanic				-.068	.093	0.000	-.047	.092	.0001	-.057	.085	0.000
Male				.402***	.064	0.014	.403***	.064	0.014	.241***	.060	0.005
Family Income_2010				0.021***	.006	0.004	.018**	.006	0.003	.016**	.006	0.002
<b>Transition Milestones (Single &amp; Parent ref groups)</b>												
Marital Status												
DummyMarStatus_Cohabiting							.173 <sup>+</sup>	.094	0.001	.074	.087	0.000
DummyMarStatus_Married							.516***	.086	0.013	.354***	.080	0.006
DummyMarStatus_Others							-.024	.147	.0000	-.065	.136	0.000
Parenthood Status 2010							-.195*	.076	0.002	-.050	.072	0.000
No Child												
<b>Educational Achievement (HS or less &amp; \$20k Plus Ref groups)</b>												
Highest Degree 2010												
EduDummy_AA							.374***	.103	0.004	.378***	.072	0.008
EduDummy_Bachelors							.242 <sup>+</sup>	.131	0.001			
EduDummy_Graduates												
Educational Loans 2010												
EduLoans_Zero							-.1640***	.209	0.018	-.1660***	.124	0.053
EduLoans_1to5K							-.1249***	.117	0.034	-.032	.127	0.000
EduLoans_5to10K												
EduLoans_10to20K												
<b>Model Summary</b>												
R	0.039			0.162			0.200			0.440		
R <sup>2</sup>	.002			.026			.040			.194		
Adjusted R <sup>2</sup>	.000			.023			.036			.188		
R <sup>2</sup> Change	.002			.025			.014			.154		
F for change in R <sup>2</sup>	1.048			17.283***			9.735***			73.903***		

Notes: \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4.9: Unstandardized Coefficient &amp; Odds Ratio From Binary Logistic Regression: Models of Homeownership in 2010 (N=2574)

	Model 1			Model 2			Model 3			Model 4		
	B	SE	Odds Ratio	B	SE	Odds Ratio	B	SE	Odds Ratio	B	SE	Odds Ratio
<b>Family Capital</b>												
Constant	-1.700***	0.055	0.183	-1.893***	0.170	0.151	-2.361***	.221	.094	-2.929***	.345	.053
F1: Parental Involvement	0.091	0.086	1.095	.055	0.085	1.057	-0.015	0.090	0.985	-0.027	0.090	0.974
F2: Socioeconomic Status	0.055	0.069	1.056	-0.032	0.085	.968	0.076	0.087	1.079	0.022	0.094	1.023
F3: Social Network	0.005	0.08	1.005	-0.015	0.081	.985	-0.018	0.085	0.982	-0.017	0.085	0.983
F4: Closeness to Parental Figures	0.002	0.098	1.002	.007	0.099	1.007	0.016	0.103	1.016	0.019	0.104	1.019
<b>Demographics (White &amp; Females ref groups)</b>												
DimnyRace_Black				-0.833***	.163	.435	-0.609***	.173	.544	-0.581**	.175	.559
DimnyRace_Hispanic				-.274+	.160	.760	-.285+	0.168	0.752	-.292+	.171	.746
Male				-0.229*	.113	.795	-0.108	0.119	0.898	-.093	.121	.911
Family Income_2010				-0.018+	.009	1.018	0.012	0.011	1.012	.010	.011	1.010
Log10_Age-25 Debt				-0.120**	.035	1.128	.078*	.037	1.081	-.071+	.040	1.074
<b>Transition Milestones (Single &amp; Parent ref groups)</b>												
<b>Marital Status</b>												
DummyMarStatus_Cohabiting				0.565***	0.188	1.759	0.564**	.189	1.757	0.564**	.189	1.757
DummyMarStatus_Married				1.662***	0.152	5.272	1.605***	.155	4.979	1.605***	.155	4.979
DummyMarStatus_Others				.944***	.252	2.569	0.949***	0.253	2.582	0.949***	0.253	2.582
Parenthood Status 2010												
No Child				-.459**	.132	.632	-.516***	0.137	0.597	-.516***	0.137	0.597
<b>Educational Achievement (HS or less &amp; \$20k Plus Ref groups)</b>												
<b>Highest Degree 2010</b>												
EduDummy_AA												
EduDummy_Bachelors												
EduDummy_Graduates												
<b>Educational Loans 2010</b>												
EdLoans_Zero												
EdLoans_1to5K												
EdLoans_5to10K												
EdLoans_10to20K												
<b>Goodness of Fit</b>												
X2	2.758			60.679***			281.26***			296.315***		
df	4			9			13			20		
- 2 Log Likelihood	2231.12			2173.20			1952.62			1937.56		
Pseudo R-Square (Nagelkerke)	0.002			0.040			0.178			0.187		

+p &lt; .10; \*p &lt; .05; \*\*p &lt; .01; \*\*\*p &lt; .001

## Chapter 5: Conclusions and Future Directions for Research and Practice

### **Conclusions Drawn from Papers One, Two and Three**

This dissertation explored the ways in which contemporary natal families influence the transition to adulthood processes of their young adults, through the use of their stock of family capital. The project started by making the observation that the current cohort of young adults in America are transitioning into adulthood in a societal context of unprecedented social and economic inequality in virtually all aspects of American life (Blank, 2011; Page & Jacobs, 2009; Pfeffer, Danzinger & Schoeni, 2013; 2014; Saez, 2012). The dissertation also noted that the current cohort of young people are on a new schedule of life characterized by achieving typical adult roles and statuses through lengthening processes and emerging evidence suggests that transitions to adulthood for the current cohort of young people differ across categories of class, race and gender (Berlin, Furstenberg & Waters, 2010; Berzin & De Marco, 2010; Furstenberg, 2006; 2008; 2010).

In the stratification literature, Pierre Bourdieu (1984; 1986) proposed that families of origin invest their stock of resources (family capital) to influence the life chances and life outcomes of their children. He further argued that since families hold varying amounts of capital, investments that families make in their children is a powerful mechanism for the intergenerational transmission of advantage and ample empirical research exists that supports this proposition. This dissertation also noted that existing theory and research using Bourdieu's perspective of family capital has not yielded a detailed understanding of the multidimensional nature of family resources and processes that natal families use to affect the life chances and life outcomes of their young adults, particularly using secondary data. Therefore, this dissertation, in a series of three paper, embarked on a study of exploring the multidimensional family capital

concept as proposed by Bourdieu (1984; 1986) and then applying the different dimensions of family capital to examine the educational achievement and the economic well-being of a contemporary cohort of young adults.

The first paper's main objective was to address the measurement challenges in Bourdieu's framework by identifying the underlying structural factors that constitute the key dimensions of the latent family capital construct. Taking care to adhere to Bourdieu's perspective, the paper used 15 select indicators of family resources and processes measures and an exploratory factor analysis (EFA) to identify a four factor model. The 1<sup>st</sup> Factor seemed to constitute measures that suggested Parental Involvement, the 2<sup>nd</sup> Factor seemed to capture measures of Social Economic Status (SES) of families, the 3<sup>rd</sup> Factor seemed to constitute measures that suggested Social Networks and the 4<sup>th</sup> Factor appeared to capture Closeness to Parental Figures. This was a new finding in the literature, although, the different dimensions of the concept in varying degrees are well documented in the literature. (Duncan & Magnuson, 2005; Fingerman et al, 2012; Guldi, Page & Stevens, 2007; Hartinger-Saunders et al, 2012; Johnson et al, 2011; Keister, 2005; Lareau, 2000; 2003, Lareau & Weininger, 2008; Mazmuder, 2005; Schoeni & Ross, 2005). This paper's findings will, hopefully, begin to clear up some of the murkiness surrounding this concept by adding some clarity to the dialogue.

The second paper examined how the different forms of family capital influenced educational attainment of young adults in the NLSY97 data using Ordinal Logistic regressions. The major finding in the analysis suggested that the different dimensions of the latent family capital construct are a promising and adequate measure whose model fits the data well, even with the addition of other controls. However, the different dimensions of the latent family capital construct influence educational achievement differently. While Family Involvement and SES are

positively associated with higher levels of educational achievement throughout the different models estimated, Social Networks and Closeness-to-Parental Figures are significantly associated with educational achievement only with inclusion of certain controls, namely, the traditional milestones associated with adulthood.

The third paper examined how the different forms of family capital affected young adults' economic well-being, when measured by debt holding and home ownership at age 25. The major finding in this paper was that the different dimensions of the latent family capital construct were not adequate in predicting age 25 economic well-being of young adults, except for the SES dimension and only for age-25 debt holding.

Taken together, these findings suggest that an attempt to continue revising and refining Bourdieu's theoretical framework in parental investment, aided by more theoretically specific longitudinal data, is a worthwhile theoretical endeavor that could help us advance our understanding of the salient family resources and process in contemporary society (paper 1). In addition, Bourdieu's family capital conceptualization has empirical promise to advance our understanding of the mechanisms through which family capital is invested in young adults during their transition to adulthood (papers 2 & 3), although the, such as the economic well-being of young adults, should be measured at a later age during young adulthood, may be during ages 29 - 34.

### **Future Directions for Research & Practice**

This dissertation project has been an invaluable learning experience that will inform my research and practice agenda as I move forward with my scholarly development. Two areas in which this scholarly work will seek to further develop revolves around the methodological advancement and model testing of the improved measures of the dimensions of family capital

and their influence of young adults' life outcomes. The second area of scholar focus revolves around policy/program practice. The discussion that follows is a brief demonstration of how I envision moving forward with my scholarly development.

### **Methodological Advancement & Model testing**

The indicators used to measure the latent family capital construct in the NLSY97 data need further development so as to accurately capture family capital and its deployment during young adulthood. At the moment, the family processes measures (most of the social and cultural capital) used in the NLSY97 data primarily captures family influences in the early stages of the life-course, that is, in childhood and adolescence. This is partly due to the fact that the family processes indicators in the NLSY97 are generally developed by researchers from the Child Trend, who have focused primarily (for the last 30 or so years), on social and psychology developmental of children and adolescents. However, for scholars interested in examining family processes that extend into young adulthood using the same data, the current measures do not serve them well.

For instance, in data documentation in the NLSY97, there is the claim that Child Trends does have indicators that measure parental involvement in schools over time throughout the life course, childhood to young adulthood (Child Trends, 2013). However, when one examines the actual indicators of parental involvement in education settings, it is evident that the indicators, therein, are generally for lower educational institutions (elementary school to high school). These indicators primarily capture parental involvement as including attendance in a general school meeting, attending a scheduled meeting with a child's teacher, volunteering in the school or serving on a school committee. These indicators, although good at the earlier stages of the life-course, do not fully capture the kind of parental involvement commonly needed or used during

young adulthood in areas such as higher education or in the labor market or in the establishment of independent homes.

For example, in higher educational institutions evidence suggests that parental involvement may include, helping the young adults secure financial assistance, providing advice with course enrollment, calling the college to seek support or academic counseling (Lareau & Weininger, 2008; Levine & Dean, 2012). In short, parental involvement at this stage is directed towards helping the young person navigate institutions and systems to their advantage.

Therefore, there is need to extend measures of family processes, in this nationally representative dataset, into later stages of the life-course, particularly in young adulthood. Stated differently, we should make them age appropriate.

Once I have revised the indicators of measures of the latent family capital construct, to make them more reliable and developmentally appropriate, the next phase of this work will focus on moving from an exploratory analysis, to the utilization of statistical techniques that are strongly theory driven such as confirmatory factor analysis (CFA) or structural equation modeling (SEM). Although, one of the goals of this project was to identify the underlying latent structure of the family capital construct (model generation), the use of an exploration technique to see if the 15 selected indicators could be reduced to a smaller number of variables that constitute the different dimensions of the latent structure was not ideal. In fact, it was difficult to reproduce the three dimensions of family capital originally proposed by Bourdieu (1986; 1984). Also, replication challenges of analysis using EFA are well documented in the literature (for example, see Bartholomew et al., 2008; Warner, 2008), even when we take into consideration this project's data constraints discussed in the preceding papers. However, use of this technique was reasonable because we sought to refine and reapply a theoretical framework that has not

been well developed since Bourdieu proposed it. Thus, the attempt to identify the underlying structure of our data was a worthwhile endeavor that has clarified my thinking in this area and the necessity of developing measures that are developmentally appropriate to the field of young adulthood. Therefore, with the new knowledge of the possible distinct dimension of the latent family capital construct and the importance of improving on the family processes measures, that are developmentally appropriate for young adults, it might be possible to test further application of Bourdieu's family capital perspective with the NLSY97 data. These could also help researchers replicate the study using different datasets such as the Panel Study of Income Dynamics (PSID) or the National Longitudinal Study of Adolescent Health (Add Health).

### **Policy and Program Practice**

The findings of this dissertation, even with the limitations taken into account, are relevant for policy and program practice. The finding that SES and Family Involvement do matter, particularly with educational attainment, is consistent with a large body of research evidence and numerous policies and program interventions have been developed in an attempt to bolster the education achievement process of young adults from disadvantaged background (Fingerman et al, 2012; Guild, Page & Stevens, 2007, Lareau, 2000; Lareau & Weininger, 2008, Rumberger, 2010). The problem, though, is that the conventional approaches to increase education achievement for many students from low-income families, minority students or 1st generational students is to focus on financial and institutional approaches (Carnevale & Strohl, 2013; Conley, 2001; Davis, Tomeka & Welcher, 2013; Hanover Research, 2011; Kahlenberg, 2010; Kelly & Carey, 2013; Kinzie et al., 2008; Swail, Redd & Perna, 2003). For instance, some focus has been on increasing federal, state and institutional grants/loans (Conley, 2001; Hanover Research, 2011; Kahlenberg, 2010; Kelly & Carey, 2013). Other efforts have been on establishing

programs at the higher educational institution for the recruitment and retention of low-income students (Swail, Redd & Perna, 2003). And, still other efforts are community-based initiatives that attempt to identify talented and promising disadvantage children with the aim of assisting them access, persist and succeed in higher educational institutions (Kahlenberg, 2010; Posse Foundation, 2013; Swail, 2004; Swail, Redd & Perna, 2003; Walsh, 2011).

While all these efforts have achieved some success, they are usually expensive and unsustainable especially during times of economic downturn (Kelly & Carey, 2013). In the end, we find that that there continues to be a widening gap of educational achievement between students from high and low-income families, with important implications to other life outcomes (Kelly & Carey, 2013; Rumberger, 2010). Therefore, for researchers and policy makers interested in addressing the educational achievement gap between young adults from low-income versus affluent families, it might be important to maybe begin exploring other approaches that have been largely overlooked in institutions of higher educations, such as interventions that focus on leveraging the resource pool and processes of disadvantaged families.

The next phase of this dissertation project is an attempt to do just that. This next phase begun with a critical review of the literature on programs that promote disadvantaged students' access, retention and graduation rates in higher education (Carter, 2006; Hanover Research, 2011; Kahlenberg, 2010; Kinzie, et al., 2008; Posee Foundation, 2013; Seidman, 2005; Swail, 2004; Swail, Redd & Perna, 2003). The critical review also included a close examination of several successful programs that have found to be successful in the literature. Four exemplar programs were identified and case studies conducted in an attempt to identify the significant components to their success. Two of the programs are community based, namely, the Rainer Scholar – a local community initiative and the Posse Foundation – another community initiative

that has chapters across the nation (Hanover Research, 2011; Kahlenberg, 2010; Kinzie, et al., 2008; Posee Foundation, 2013; Seidman, 2005). Also, two interventions in higher education institutions were examined, namely The Texas Interdisciplinary Plan (TIP) at University of Texas Austin and the Champions Program at the UW Office of Minority and Diversity Affairs OMAD (Hanover Research, 2011, Kahlenberg, 2010; Kinzie, et al., 2008; Stacy, 2005; Swail, 2004; Swail, Redd & Perna, 2003; Tough, 2014). Altogether, the review found that exemplar programs have five components (strengths) that make them successful in promoting academic success of disadvantaged students. These five components include, early recruitment, intense and comprehensive support services, use of cohort models, post-college or career orientation as well as financial scholarships (Hanover Research, 2011; Swail, 2004; Swail, Redd & Perna, 2003).

Briefly, successful retention programs include a program component that is specifically aimed at reaching out to disadvantaged high school students and helping them prepare academically, socially and emotionally for college educational and college life. This was observed in two of the four programs reviewed, namely, Rainer Scholars and Posse. The many rationales presented for early recruitment can simply be categorized into two: One, early recruitment helps potential college students from disadvantaged background with the necessary academic preparations to improve their academic skills to meet college academic demands once the students get in college. Two, and an important feature of early recruitment, it enables these programs orient the students towards college life (Hanover Research, 2011; Posse Foundation, 2013). It is conventionally taken for granted that students will generally adapt themselves to their new college environment and be successful in developing relationships with peers, faculty, and administrators. However, a review of these exemplar programs suggests that for many

disadvantaged students, even the acquisition of these soft skills may require a little nudging and cultivation.

In addition, all the programs reviewed offered comprehensive support services that catered for both the academic and non-academic needs of the students (Kelly & Carey, 2013). While this is not a new insight from the case studies, it adds voice to the need of providing wraparound services to college students especially at the beginning of their college careers. A key strength of wraparound services is that it helps the student adjust to their new environment without feeling overwhelmed by the new college demands and increased pace of life (Posse Foundation, 2013). Perhaps a critical insight from this review that might not be conventional wisdom is the realization that successful college retention programs incorporate a cohort model within its program components. Except for the Champions program at UW OMAD, the other three programs reviewed (TIP program, Rainer Scholar and Posse) made use of groups or teams for their program scholars. Cohorts were useful in academic study activities such as tutoring and provision of moral support as well as avenues where students learn from one another. This is really a great insight that actually goes contrary to popular perception about college life where individualism and competitiveness seems to be more emphasized than the collaborative working together approach.

Last but not least, another insightful from the literature reviews and case studies is the realization that post-college and career orientations was a common thread that was found in all programs (Hanover Research, 2011; Kelly & Carey, 2013; Posse Foundation, 2013; Swail, 2004; Swail, Redd & Perna, 2003). While post-college and career orientation is an obvious focus of post-secondary institutions as their core business is to training individuals for post-college life, what was striking and unique was the incorporation of leadership skills development and

community service in each of these programs. The four programs contained this critical element. It is important to acknowledge that students are rarely trained in developing critical leadership skills as part of their college education. There could be a few courses offered on leadership, depending on specific college degrees pursued, but rarely are these an integral part of college training for majority of college students. My conjecture is that this component provides meaningful opportunities to the participants and helps students make connections between their training and making an impact in the real world. Finally, scholarships or some form of financial aid were an integral part of each of the programs reviewed and just adds credence to the need to continue providing financial aid for all college students, particularly those from disadvantaged background. Financial aid simply makes college education affordable.

Although numerous efforts have gone into developing a variety of student retention programs and much success has been achieved, my review of the literature and exemplar programs has identified two key areas of weakness that my proposed intervention might address. These two areas of weaknesses relate to the continued disconnection between the lower and the higher education systems as well as the minimal parental involvement particularly of students from disadvantaged backgrounds.

The review of the literature and the exemplar programs, particularly Rainer Scholars and Posse, suggests that early identification and recruitment of disadvantaged students in middle and high school is critical in preparing these students for successful academic and college life. However, contemporary approaches used to link lower education with higher education have been piecemeal rather than systemic and as a result leaves a gap between lower and higher education systems whereby secondary education ill equips students, for college education, particularly for students from disadvantaged background who also happen to attend poorly

resourced schools (Kirst, 2008). While it would be beneficial to reform the underlying structure of the entire education system in the U.S., by making greater connection of lower level education (elementary and secondary) to postsecondary education, addressing this weakness at this juncture would be going beyond the scope of this paper. However, it is important to note that an innovative program (for example Rainer Scholar and Posse) are able to develop interventions that allow for a seamless transition from lower to higher education and these more forcefully increases students' preparedness, entry and success in postsecondary schooling.

Of great import to the dissertation project is the need to explore interventions that increase parental involvement of students, particularly those from low-income, minority and 1<sup>st</sup> generational students. There is minimal attention by researchers, policy makers or practitioners on the need to increase parental involvement of disadvantaged students although ample evidence shows that affluent parents are increasingly involved in their college children's education attainment process and this has resulted in disparities in educational achievement between students from advantaged and disadvantaged background (Charles, Roscigno & Torres, 2007; Fingerman et al., 2012; Lareau & Weininger, 2008; Levine & Dean, 2012). The various programs reviewed mention parental involvement especially during college outreach and recruitment activities, but a critical assessment of these programs suggested that the involvement is superficial at best or just symbolic. For instance, Rainer Scholars has a clearly stated objective that it aims to work with both the student scholars and their families. However, on close scrutiny, parental involvement was found to be limited to informational sessions during college exploration and admission process. Minimal parental involvement was reported particularly during college attendance years.

### **Envisioning a Plan for a Programmatic Intervention Research**

Therefore, my next area of research practice proposes a program intervention, simply referred to as the Two Generation (Two-Gen) program, that aims to increase parental involvement in the higher educational attainment process for low-income, minority and 1<sup>st</sup> generational students (the Capstone Project at the Evans School). The Two-Gen program builds on the strength of extant student retention programs already in operation across the country, including the strengths discussed above. It also aims at addressing the later weakness found in these programs.

In summary, the Two-Gen program is a six-year program that begins during the senior year in high school and culminates a year after college graduation. The program has three overarching objectives, namely: 1) Increase parental involvement in students' academic life from high school to college graduation. 2). Improve the recruitment & retention of minority, low-income & 1st generation students. 3) Increase the rate of persistence and timely (on-time) graduation rate of minority, low-income & 1st generation students. The program will attempt to achieve the above objectives through four main program avenues: 1) High School Outreach, and Active Recruitment of eligible students, 2) Academic Counseling and Support, 3) Career Preparation and 4) Leadership Development. Please not that there is a lot of details go into each of this components, however, what follows is a brief discussion for each of these components primarily focusing on how parental involvement would be facilitated.

**High School Outreach and Active Recruitment:** The first component would take place during the senior year in high school and involves outreach to local high schools within the respective state where the proposed program is implemented and the active recruitment of eligible students – low-income, minorities and 1<sup>st</sup> generational students. Use of local high

schools for outreach is deemed appropriate because it would facilitates easier involvement of the parent(s). An outreach team made up of a program personnel and 4-5 upper division students who are work-study eligible will be employed. In subsequent years, older programs scholars and their parents would be used for outreach and recruitment. Outreach basically involves meeting parent(s) and student to explore post-secondary schooling options, including getting information on the college application and admission process. Outreach would also involve activities that prepare the students for academic careers, namely, academic tutoring and team building activities.

**Academic Counseling and Support:** This component relates to a variety of academic activities that would take place throughout the program. These activities would involve addressing any academic and non-academic issues, be it tutoring or provision of support services. It would also including addressing issues such as financial aid, housing, and identification of necessary resources within the campus and the wider community that may be affecting the student/family. This component also involves periodic conference meeting with the parent(s) to discuss how the student could be best supported.

**Career Preparation:** This component would help the student and the parent explore career options including providing professional development training and opportunities such as internships with local businesses and networking activities. Providing both parental and student information session would help the parents be supportive of students' desired career path. Working with both the student and the parent would help both envision the student's future career.

**Leadership Development:** This component involves encouraging the students and the parent to be civically engaged within the college community as well as in their community

setting. Leadership skills training would also be provided that include, team building, time management as well as retreats where students, their parents, invited college and community leaders would discuss issues important to them. Also, student and their parents would be encourage to volunteer for college outreach and recruitment or another community service. Upon completion of specified hours of community service, the family would get a stipend to help with college costs.

It is important to note that the above is just a snapshot of a proposed two generational program that could assist in improving outcomes for disadvantaged young adults within the higher education institutions. The above discussion is just for illustrative purposes about how such a program would look like. More details are provided in the aforementioned capstone project. As a continuing line of scholarly inquiry, the implementation of the proposed program would also include a formative evaluation to assess the nature and the scope of the Two-Gen program implementation process, and a summative evaluation to assess the impact that the program could have on the recruitment, admissions, retention and on-time graduation of the participating students when compared to a control/comparison group.

In closing, the above discussion remains as yet very preliminary ideas of a potential intervention program to improve outcomes of disadvantaged young adults in higher education. These ideas are inspired by Bourdieu's pioneering work on a rich and multi-dimensional conceptualization of family capital and imagining the ways in which the strengths and aspirations of the natal family can be potentiated in the search to reduce race and class based disparities in educational attainment and prospects for a better future.

### References

- Bartholomew, D., Steele, F., Moustaki, I. & Galbraith, J. (2008). *Analysis of multivariate social science data*. Boca Raton: CRC Press.
- Bourdieu, P. (1986). The Forms of Capital. In John Richardson (ed.). *Handbook of theory and research for the sociology of education*. New York: Greenwood Press, p. 241-258.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Cambridge, Mass: Harvard University Press.
- Bowles, S., Gintis, H., & Osborne, G. M. (2005). *Unequal chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- Carnevale, A., & Strohl, J. (2013). Separate and Unequal: How Higher Education Reinforces the Intergenerational Reproduction of White Racial Privilege. *Report from Center on Education and the Workforce*. Found at [www.cew.georgetown.edu/separateandunequal](http://www.cew.georgetown.edu/separateandunequal)
- Carter, D. (July 14, 2006). Key issues in the persistence of underrepresented minority students. *New Directions for Institutional Research, 2006*, 130, 33-46.
- Charles, C. Z., Roscigno, V. J., & Torres, K. C. (2007) Racial inequality and college attendance: The mediating role of parental investments. *Social Science Research*, 36(1), pp. 329-352.
- Child Trends. (2013). Parental involvement in schools . Available at: <http://www.childtrends.org/?indicators=parental-involvement-in-schools>
- Conley, D. (2001). Capital for College: Parental assets and postsecondary schooling. *Sociology of Education*, 74, 59-72.
- Davis, T. Tomeka, M. Welcher, A. N. (2013). School quality and the vulnerability of the black middle class: the continuing significance of race as a predictor. *Sociological Perspectives*, 56(4), pp. 467-493.
- Haskins, R., Grafinkel, I., & McLanahan, S. (2014). Introduction: The Two-Generational Mechanisms for Child Development, *Future of Children*, 24 (1), pp. 3-12.
- Fingerman, K., Cheng, Y., Wesselmann, E., Zarit, S., Furstenberg, F. & Birditt, K. (2012). Helicopter Parents and Landing Pad Kids: Intense Parental Support of Grown Children. *Journal of Marriage and Family*, 74, p. 880-896.
- Guldi, M., Page, M. and Stevens, A. (2007). Family background and children's transitions to adulthood over time. In S. Danziger and C. Rouse (eds). *The price of Independence. The Economic of Early Adulthood*. New York: Russell Sage Foundation.

- Hanover Research. (2011). *Improving Student Retention and Graduation Rates*. Report on strategies and best practices for improving student retention and graduation rates among a group of public, four-year institutions of higher education. Found at <http://www.mybrcc.edu/intranet/attachments/article/110/Improving%20Student%20Retention%20and%20Graduation%20Rates.pdf>
- Hartinger-Saunders, R., Rine, C., Wieczorek, W. & Nochajski, T. (2012). Family level predictors of victimization and offending among young men: Rethinking the role of parents in prevention and interventions models. *Children and Youth Services Review*, 34, pp. 2423–2432.
- Haskins, R., Grafinkel, I., & McLanahan, S. (2014). Introduction: The Two-Generational Mechanisms for Child Development, *Future of Children*, 24 (1), pp. 3-12.
- Keister, L. A. (2005). *Getting rich: America's new rich and how they got that way*. Cambridge, UK: Cambridge University Press.
- Kahlenberg, R. D. (2010). *Rewarding strivers: Helping low-income students succeed in college*. New York: Century Foundation Press.
- Kelly, A. P., & In Carey, K. (2013). *Stretching the higher education dollar: How innovation can improve access, equity, and affordability*. Cambridge, Massachusetts: Harvard Education Press.
- Kinzie, J., Gonyea, R., Shoup, R., & Kuh, G. (September 29, 2008). Promoting persistence and success of underrepresented students: Lessons for teaching and learning. *New Directions for Teaching and Learning*, 2008, 115, 21-38
- Kirst, M.W. (Fall, 2008). "Secondary Schools and Colleges Must Work Together." *Thought & Action*
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education*. Lanham, MD: Rowman & Littlefield Publisher.
- Lareau, A. (2003). *Unequal childhoods: Class race and family life*. Los Angeles: University of California Press.
- Lareau, A and Weininger, E. (2008). Class and the Transition to Adulthood. In A. Lareau and D. Conley. *Social class: How does it work?* New York: Russell Sage Foundation.
- Levine, A., Dean, D. R., & Levine, A. (2012). *Generation on a tightrope: A portrait of today's college student*. San Francisco: Jossey-Bass.

- Mazumder, B. (2005). The Apple Does Not Fall Far from the Tree: New and revised estimates of the intergenerational inheritance in earning. In S. Bowles, H. Gintis & O. Groves (Eds.). *Unequal Chances: Family background and economic success*. New York: Russell Sage Foundation and Princeton University Press.
- Posse Foundation. (2013). *Celebrating 25 years Annual Report 2013*. Found at [http://www.possefoundation.org/i/articles/AnnualReport\\_2013.pdf](http://www.possefoundation.org/i/articles/AnnualReport_2013.pdf)
- Rumberger, R (2010). Education and the reproduction of economic inequality in the United States: An empirical investigation. *Economics of Education Review*, 29 (2) , p. 246–254.
- Seidman, A. (March 01, 2005). Minority student retention: Resources for practitioners. *New Directions for Institutional Research*, 2005, 125, 7-24.
- Stacy, C. (2005). Evaluation Report Presentation of the Texas Interdisciplinary Plan (TIP). Found at <https://journals.psu.edu/wepan/article/viewFile/58385/58073>
- Settersten, R. A., & Ray, B. (2010). *Not quite adults: Why 20-somethings are choosing a slower path to adulthood, and why it's good for everyone*. New York: Bantam Books Trade Paperbacks.
- Settersten, R. and Ray, B. (2010b). What's Going on with Young People Today? The Long and Twisting Path to Adulthood. *The Future of Children*, 20 (1), p. 19-41.
- Schoeni, R. & Ross, K. (2005). Material assistance from families during the transition to adulthood. In R. Settersten, F. Furstenberg & R. Rumbaut (Eds.), *On the frontier of adulthood. Theory, research and public policy*. Chicago: University of Chicago Press.
- Staff, J., & Mortimer, J. T. (2008). Social class background and the school-to-work transition. *New Directions for Child & Adolescent Development*, 2008, (119), p. 55-59.
- Swail, W. S., Redd, K. E., & Perna, L. W. (January 01, 2003). Retaining Minority Students in Higher Education A Framework for Success. *Ashe Eric Higher Education Report*.
- Swail, W. S. (2004), *The Art of Student Retention: A Handbook for Practitioners and Administrators*. Texas Higher Education Coordinating Board. 20<sup>th</sup> Annual Recruitment and Retention Conference. Education Policy Institute. Found at <http://files.eric.ed.gov/fulltext/ED485498.pdf>
- Tough, P. (May 15<sup>th</sup> 2014). Who gets to Graduate. Magazine. The New York Times. Found at <http://www.nytimes.com/2014/05/18/magazine/who-gets-to-graduate.html>

- Walsh, R. (2011). Helping or Hurting: Are Adolescent Intervention Programs Minimizing Racial Inequality? *Education and Urban Society*, 43(3) pp. 370-395.
- Warner, R. (2008). *Applied Statistics: From Bivariate through Multivariate Techniques*. Los Angeles: Sage Publication.
- Whightman, P. & Danziger, S. (2011). Poverty, Intergenerational Mobility and Young adult Education Attainment. *Research Network Working Paper (June)*, Network on Transitions to Adulthood.

**Eric N. Waithaka****Curriculum Vitae**

University of Washington School of Social Work  
 4101 15<sup>th</sup> Ave. NE  
 Seattle, WA 98105-6299

waithaka@uw.edu

**EDUCATION**

<b>PhD</b>	<b>University of Washington Seattle, School of Social Work</b> <b>Dissertation Title:</b> <i>Applying Bourdieu's Conceptualization of Family Capital to our Understanding of Young Adults life outcomes: Educational Achievement and Economic Well-being</i>	Fall 2014
<b>MPA</b>	<b>University of Washington Seattle, Evans School of Public Affairs</b> <b>Specialization:</b> Social Policy: Poverty, Education and Social Welfare	June 2015
<b>MSW</b>	<b>Washington University in St. Louis, Brown School of Social Work</b> <b>Research Specialization:</b> Social Economic Development	August 2005
<b>BA</b>	<b>Daystar University, Kenya</b> <b>Major:</b> Community Development <b>Minor:</b> Business Administration	May 2000

**AWARDS, HONORS, GRANTS, & FELLOWSHIPS**

<b>Student Award for Leadership and Service</b> Group for the Advancement of Doctoral Education (GADE)	10/2011
<b>Trainee – Shanahan Endowed Fellowship</b> Center for the Studies of Demography and Ecology (CSDE) University of Washington Seattle	09/2009-09/2011
<b>Boeing Endowed Fellowship</b> University of Washington Seattle	09/2007-06/2008
<b>Graham Taylor Second Year Scholarship</b> Washington University in St. Louis	08/2004-05/2005
<b>Work-study Scholarship</b> Daystar University, Kenya	08/1997-05/2000

## RESEARCH INTERESTS & EXPERIENCE

---

### **INTERESTS:**

‡ Young adults' transitions into adulthood, Education Achievement, Poverty and Inequalities, Family Capital, Social Institutions, and Institutional Change

### **EXPERIENCE:**

**Principal Investigator:** 10/2008-04/2011

U.S. Department of Housing and Urban Development (HUD), Early Doctoral Student Research Grant (EDSRG #H-21547SG)

Project Title: *Envisioning Possible Futures: Emerging adults from families living in public housing and their visions about future stability and asset ownership*

**Research Assistant/Interviewer:** 01/2008-12/2010

University of Washington, School of Social Work

Project title: *Study of Family Life, Work and Finances* (Principle Investigator: Jennifer Romich, PhD)

**Co-Investigator:** 03/2008-05/2009

Center for Financial Services Innovation (CFSI)

Project Title: *Consumer Impact Study for Innovative Financial services* (Principal Investigator: Jennifer Romich, PhD)

**Research Analyst** 01/2005-08-2007

Institute of Applied Research in St. Louis

Projects: Conducted evaluation research of social programs and services, particularly Title IV-E Waiver Demonstrations in Child Welfare Services and Jail Diversion (drug court) Programs

**Co-Investigator:** 05/2004-01/2005

Center for the Study of Human Values and Ethics, Washington University in St. Louis

Project Title: *Ethical Issues in Social Work Training among Masters of Social Work Students at the George Warren Brown (GWB) School of Social Work, Washington University in St. Louis* (Faculty Advisors: Deborah Megivern and John Bricout, PhDs)

**Research Assistant:** 09/2004-08/2005

Dr. Stephanie Boddie, Washington University in St. Louis

Various projects: Conducted literature reviews and developed databases for information to be used in journal articles, conference

papers, and presentations. Research areas included; charitable choice legislation, community development, neighborhood economic development, and faith-based initiatives in black communities

## **TEACHING INTERESTS & EXPERIENCE**

---

### **INTERESTS:**

∩Poverty and Inequalities, Social Stratification, Intergenerational Mobility, Economics of Social Welfare, Research Methods, Program Evaluation and Policy Analysis

### **EXPERIENCE:**

- |  |                                 |
|--|---------------------------------|
| <p><b>Foundations of Social Welfare Research (Sole Instructor)</b><br/>The course presents an overview of the research process/methods in social work, with focus on consuming and performing practice-related research. Course also emphasizes on critical understanding of empirical literature, development of useful and appropriate questions about social work practice, and strategies and techniques for doing research and applying findings to practice.</p> | <p>Fall 2014</p>                |
| <p><b>Social Welfare Practice III (Sole Instructor)</b><br/>The third required course in a three quarter Social Welfare Practice sequence in the BASW program. Focus of this course is on macro system for the generalist social worker.</p>   | <p>Spring 2014 &amp; 2013</p>   |
| <p><b>Social Welfare Research and Evaluation (Sole Instructor)</b><br/>This is the second course of a two-quarter research methods sequence in the MSW program. Focus of this course is on development of a research proposal, implementation of a pilot research study, data analysis and interpretation, presentation of results/findings.</p>   | <p>Winter 2014 &amp; 2013</p>   |
| <p><b>Poverty and Inequality (Sole Instructor)</b><br/>This is a required course in the MSW program. Focus of this course is on causes of poverty and public policy response in the United States including the socioeconomic dimensions of stratification</p>   | <p>Fall 2013</p>                |
| <p><b>Poverty and Inequality (Teaching Assistant)</b><br/>This is a required course in the MSW program. Focus of this course is on causes of poverty and public policy response in the United States including the socioeconomic dimensions of stratification.</p>   | <p>Fall 2012</p>                |
| <p><b>Social Welfare Research and Evaluation (Sole Instructor)</b><br/>This is the second course of a two-quarter research methods sequence in the MSW program. Focus of this course is on development of a research proposal, implementation of a pilot research study, data analysis and interpretation, presentation of results/findings.</p>   | <p>Winter &amp; Spring 2012</p> |

**Social Work for Social Justice (Sole Instructor)**

This is a required foundational course in the MSW program. Focus of the course is on development of a Personal-Professional Stance toward social work practice for cultural diversity and social justice. Fall 2011

**Policy Processes, Institutions and Influences (Teaching Intern)**

Fall 2010

This course is for MSW students concentrating on Administration and Policy Practice. Focus of the course is on the institutions and processes through which social policies are developed, including an analysis of implications of these processes on social justice.

**Human Behavior in Social Environment I & II (Teaching Assistant)**

Fall 2008 &amp; Winter 2009

This is a required two-quarter sequence in the BASW program. First course in the sequence focuses on human development across the life span. Second course focuses on the relationship between the person and the environment (micro, mezzo and macro system).

**Human Diversity (Teaching Assistance/Co-Facilitator)**

Fall 2004

This is a required foundational course in the MSW program at the Washington University in St. Louis. Focus of the course is on social justices and developing skills to communicate across difference.

## **PUBLICATIONS & PRESENTATIONS**

---

**MANUSCRIPT:**

**Waithaka, E. N.** (accepted). *Family Capital: Conceptual Model to Unpack the Intergenerational Transfer of Advantage in Transition to Adulthood*. Paper submitted to *Journal of Research on Adolescence*

**Waithaka, E. N.** (under review). *Envisioning Possible Futures: Emerging adults from families living in public housing and their visions about future stability and asset ownership*. Manuscript submitted to the *Journal of Emerging Adulthood*

Romich, Jennifer L., Gordon, Sarah and **Waithaka, Eric N.** (October 1, 2009). A Tool for Getting by or Getting Ahead? Consumers' Views on Prepaid Cards. Networks Financial Institute Working Paper 2009-WP-09. Available at SSRN: <http://ssrn.com/abstract=1491645>

**WORK IN PROGRESS:**

**Waithaka, E. N.** (in preparation). *What is the post secondary education achievement process for young adults from families with low levels of family capital?* Paper in preparation to be submitted to a Peer-Reviewed Journal

**OTHER PUBLICATIONS:**

**Waithaka, E. N.** (2011). *Envisioning Possible Futures: Emerging adults from families living in public housing and their visions about future stability and asset ownership*. A report submitted to the U.S. Department of Human and Urban Development (HUD) for the Early Doctoral Student Research Grant (EDSRG) #H-21547SG Institute of Applied Research (2005, June). *State of Mississippi Title IV-E child welfare waiver demonstration project*. Co-author in the final evaluation report prepared by Institute of Applied Research, St. Louis

**Waithaka, E. N.** (2005). *State-citizen partnership: Does it build confidence in governmental institutions in developing countries?* Paper prepared and presented for MSW thesis at GWB School of Social Work, Washington University in St. Louis

**Waithaka, E. N.** (2005, May). *Evaluation of the Minnesota's Alternative Response in Child Protective Services: The family feedback survey*. Prepared and presented as requirement for Program Evaluation and Research Practicum at GWB School of Social Work, Washington University in St. Louis

Savitzky, C. A. and **Waithaka, E. N.** (2004, December). *A report for the survey in Ethical Issues in Social Work Training among MSW Students at GWB School of Social Work*. Prepared and submitted to the Center for the Study of Ethics and Human Values, Washington University in St. Louis

**CONFERENCES & OTHER PRESENTATIONS (Presenter in Bold):**

**Waithaka, E. N.**, & Lee, J.S. (2013, October). *A Demographic Profile for Youth in Transition to Adulthood: Intersections of Race, Gender, and Poverty Status*. Paper presented at the 6<sup>th</sup> Conference of Emerging Adulthood, Chicago, Illinois, Oct 9-11 2013

**Waithaka, E.N.** (2013, January). *What is the post secondary education achievement process for young adults from families with low levels of family capital?* Paper presented at the 17<sup>th</sup> Annual Conference of Society of Social Work & Research, San Diego, CA January 16-20 2013

**Waithaka, E.N.**, & Lee, J.S. (2012, October). *Race, gender, and class in transitions to adulthood: A demographic profile*. Poster presentation, Society for Research in Child Development: Transitions from Adolescence to Adulthood Themed Meeting, Tampa, FL October 18-30 2012

**Hudson, K. D.**, Garcia, A., **Shapiro, V. B.**, Moylan, C. A., Derr, A. S., Waithaka, E. N., Almgren, G. R., & Uehara, E. S. (2011, October). *Transforming our training: Integrating a social justice framework into doctoral education*. Paper presented at the 57<sup>th</sup> Annual Program Meeting of the Council for Social Work Education, Atlanta, GA October 27-30 2011

**Waithaka, E. N.** (2011, October). Envisioning Possible Futures: Emerging adults from families living in public housing and their visions about future stability and asset ownership. Paper presented at the 5th Conference of Emerging Adulthood, Providence, Rhode Island Oct 27-28 2011

**Waithaka, E. N.** (2011, October). Unpacking the Intergenerational Transfer of Advantage in Transitions to Adulthood: A conceptual model of the economic, social and cultural capital and mechanisms through which they operate. Paper presented at the 5th Conference of Emerging Adulthood, Providence, Rhode Island Oct 27-28 2011

**Valerie B. Shapiro, MSS; Eric Waithaka, MSW; Amelia Seraphia Derr, MSW; Karl G. Hill, PhD and J. David Hawkins, PhD.** (2010, January). Using Open-Ended Survey Responses of Drug and crime Involved Youth To Explore Transitions to Adulthood. Paper presented at the 14th Annual Conference of the Society of Social Work and Research, San Francisco, CA

**Eric Waithaka, MSW; Valerie B. Shapiro, MSS; Amelia Seraphia Derr, MSW; Karl G. Hill, PhD and J. David Hawkins, PhD.** (2009, October). Substance Use and Crime Involvement during Transitions to Adulthood: Using Short Answer Survey Questions to Explore Mechanism for Change. Paper presented at the 4th Conference of the Society for the Study of Emerging Adulthood, Atlanta, GA.

Jennifer Romich, PhD; **Eric Waithaka, MSW; Sarah Gordon, BA** (2009, May). *A Tool of Getting By or Getting Ahead? Consumers' Views on Prepaid Cards.* Paper presented at Improving Financial Literacy and Reshaping Financial Behavior Conference at the Networks Financial Institute at the Indiana State University, Indianapolis, IN

---

## ADDITIONAL PROFESSIONAL EXPERIENCE

<b>Evaluation Consultant:</b> Aim High St. Louis	06/2005-11/2005
<u>Duties:</u> Assisted investigators in preparing evaluation proposal, developing survey instrument, developing dataset and analysis of data to determine the impact and effectiveness of summer program for St. Louis City middle school children.	
<b>Data Entry Person (As needed)</b> Sudden Infant Death Syndrome (SIDS) Inc	09/2004-12/2005
<u>Duties:</u> Entered pre and post data of pre-natal training seminars as needed. Also assisted in preliminary data analysis.	

**Intern**

01/2004-08/2005

Alliance for Building Capacity (ABC)

Washington University in St. Louis, Brown School of Social Work

Duties: Consulted with Boards of Directors and management staff of non-profit organizations in the St. Louis region on strategic planning, organizational governance, organizational change, board development, and social entrepreneurship. Conducted environmental scans, researched capacity building, and assisted in the planning and facilitation of workshops and seminars.

**Community Support Worker**

12/2002-10/2005

Call-4-Life Inc

Duties: Client assessment, develop client support plans, role modeling, rapport-building, and fostering of positive interactions. Assist clients in locating housing, employment, shopping, securing social security benefits, housing subsidies and other benefits. Tutor clients in budgeting, banking, living skills and bus training. Facilitate positive behavior modification in clients.

**PROFESSIONAL AFFILIATIONS & SERVICE**

---

**ACADEMIC SERVICES:****PhD Steering Committee, Application Reviewer**

01/2013 – present

University of Washington, School of Social Work

**PhD Social Justice Subcommittee, Member**

03/2009 - present

University of Washington, School of Social Work

**Graduate and Professional Student Senate (GPSS), Senator**

09/2010 - 09/2011

University of Washington

**PhD Steering Committee, Student Representative**

09/2008 – 06/2010

University of Washington, School of Social Work

**MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS**

- ☞ Council of Social Work Education, Member
- ☞ Population Association of America, Member
- ☞ Society for the Study of Emerging Adulthood, Member
- ☞ Society of Social Work and Research, Member