
Danielle R. Eugene
Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_dissertations

Part of the Social Work Commons

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_dissertations/5169

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
SOCIAL CONTEXTS AND DISCONNECTEDNESS: A MIXED METHODS ANALYSIS OF INTERRELATED EFFECTS OF FAMILIES, PEERS, AND SCHOOLS ON AFRICAN AMERICAN YOUTH

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy in

The School of Social Work

by
Danielle R. Eugene
BS, University of Louisiana at Lafayette, 2007
MSW, Louisiana State University, 2009
May 2020
I would like to dedicate this dissertation to the memory of my grandmother, Audrey Mae Hall and my uncle, Clifford W. Eugene, Jr.

To my darling mother, Rhonda E. Carr, who by devotion of your entire life to me, has afforded me the desire, willpower, opportunity, and ability to complete a doctoral program. All of my life, you have been by my side, my biggest supporter, teacher, and example of how to live life to the fullest. I consider myself most blessed among people to have you as my mother.

And to Stephen J. Harrell, Jr., I could not have asked for more encouragement, help, love, patience, and support along this journey.

Lastly, to My Creator, thank you for providing life and sustaining me through the easy time and especially during the more difficult. Without you, I am not. By your grace, I have come this far, and my prayer is that my efforts continue to bring you honor.
ACKNOWLEDGMENTS

I would like to express my heartfelt appreciation to everyone who has guided me in the completion of my dissertation. First, I would like to thank my committee members for their endless support and time invested. To Dr. Timothy Page, my committee chairman, for your expertise, reflecting, and most of all your continued support throughout this process. You have so skillfully helped me to bring an idea from its infancy into a completed project. I have truly benefited from your thoughtfulness and mentoring throughout my time in the program.

A special thank you to Dr. Eugene Kennedy for your countless hours of meetings, statistical expertise, and most of all for empowering me with so much knowledge. Dr. Kennedy, you went above and beyond in all areas to guide me through this process and I thank you from the bottom of my heart. Thank you to Dr. Judith Rhodes, your contribution to my research has been invaluable and you have remained steadfast in equipping me with the tools and skills needed to transition into academia. Thank you to Dr. Richard Moreland for agreeing to serve on my committee and for your qualitative expertise that has challenged me to dig deeper in my research.

I would also like to acknowledge my cohort, professors, colleagues, and family and friends who have continued to encourage me throughout this journey. I thank each and every one of you for giving so much of yourselves so that I could fulfill this milestone.
**TABLE OF CONTENTS**

ACKNOWLEDGMENTS ........................................................................................................ iii

ABSTRACT ............................................................................................................................. vi

CHAPTER 1. INTRODUCTION ............................................................................................. 1
  Statement of the Problem .................................................................................................. 3
  Scope of Problem .............................................................................................................. 4
  Rationale for the Study ..................................................................................................... 7
  Purpose of the Study ......................................................................................................... 9
  Research Questions ........................................................................................................... 9

CHAPTER 2. THEORETICAL FRAMEWORKS .................................................................... 11
  Ecological Systems Theory .............................................................................................. 12
  Life Course Theory .......................................................................................................... 13
  Social Development Model .............................................................................................. 15
  Application of Theories to the Study .............................................................................. 17

CHAPTER 3. REVIEW OF LITERATURE .......................................................................... 20
  Emerging Adulthood ......................................................................................................... 20
  Disconnected Youth ......................................................................................................... 22
  Risk and Protective Factors Associated with Youth Disconnection .............................. 28
  The Ways Youth Disconnect .......................................................................................... 30
  Race, School Effects, and Youth Disconnection ............................................................... 30
  Federal Policy and the Expansion of Youth Programs .................................................... 32
  Intervention Research ..................................................................................................... 40
  Implications of Reviewed Literature .............................................................................. 53

CHAPTER 4. METHODOLOGY ......................................................................................... 55
  Research Design ................................................................................................................ 56
  Research Questions and Methods Used ........................................................................ 58
  Mixed Methods Sampling Strategy ................................................................................ 58
  Phase One: Qualitative Data ............................................................................................ 59
  Phase Two: Quantitative Data .......................................................................................... 64

CHAPTER 5. RESULTS ........................................................................................................ 83
  Phase One: Qualitative Results ....................................................................................... 83
  Phase Two: Quantitative Results .................................................................................... 94

CHAPTER 6. DISCUSSION AND CONCLUSIONS .............................................................. 105
  Study Overview ............................................................................................................. 105
  Summary of Findings ..................................................................................................... 105
  Predicting Youth Disconnection: An Integrative Approach ........................................... 109
  Theoretical Implications ............................................................................................... 114

iv
Policy and Practice Implications ............................................................................................................. 115
Limitations .................................................................................................................................................. 117
Future Directions for Research .................................................................................................................. 119

APPENDIX A. IRB APPROVAL .................................................................................................................. 123

APPENDIX B. DISCLOSURE RISK REVIEW ............................................................................................. 124

APPENDIX C. VARIABLES USED IN THE MODEL .................................................................................... 125

REFERENCES .............................................................................................................................................. 127

VITA ............................................................................................................................................................ 137
ABSTRACT

Youth disconnection, characterized as no school and no work in emerging adulthood, is widespread in American society with debilitating outcomes for each affected young person. Substantial rates of this phenomenon have been found for all youth groups; however, more recently the disconnection rate for African American youth has increased from 17.2% to 17.9% despite remaining flat or falling for all other major racial and ethnic groups. This study utilized a mixed methods approach to examine features of social contexts that explain how African American youth become disconnected from education and employment. This study involved analyzing qualitative data collected from student participants (n=9) to inform variable selection from a large-scale national database (n=1,210 in 150 schools) to examine student-level and school-level predictors on the odds of being a disconnected young adult.

Qualitative findings revealed students’ desire and need for meaningful relationships with parents, peers, and school personnel as they transition to adulthood. Moreover, students reported the value of supportive and encouraging conversations with parental figures centered on school-related and workforce topics. Quantitative findings revealed that student-level predictors, such as gender, family socioeconomic status, educational expectations, parental engagement, and peer affiliation to school were significantly associated with the odds of youth disconnection. No school-level variables were associated with the outcome of disconnection. Taken together, the combination of qualitative and quantitative analyses provided more robust results that advance the literature related to the disconnected youth population. Moreover, quantitative findings corroborated what was revealed in the qualitative results with the exception of school characteristics. Directions for future research and implications for social work practice, policy, and theory are discussed.
CHAPTER 1. INTRODUCTION

They number in millions—young people ages 16-24 who are out of school and out of work—and are often forgotten by society (Belfield, Levin, & Rosen, 2012; Bridgeland & Milano, 2012). Many have left high school without a diploma and are inactive for many years (Besharov & Gardiner, 1999; Bridgeland & Milano, 2012; Rendón, 2014). Others may finish high school and even attend college, but still lack the essential education, skills, and credentials needed to obtain employment in a 21st century economy (Besharov & Gardiner, 1999; Bridgeland & Milano, 2012; Fernandes-Alcantara, 2015a). Employment that will not only help them support a family, but also help them become engaged citizens for a thriving nation (Bridgeland & Mason-Elder, 2012; Bridgeland & Milano, 2012). Their future success is necessary yet, if these youth are not supported toward a successful transition into adulthood, the vitality of our nation is likely to suffer (Bridgeland & Milano, 2012).

Despite the common reference that youth are society’s future, there has been a lack of focus on the plight of youth as they transition into adult life (Belfield et al., 2012). Emerging adulthood, the period between late teens and early 20s, is a profoundly important developmental stage characterized by change and exploration (Arnett, 2000). During this time, most young adults work towards educational and vocational goals, take on new responsibilities, and prepare for their transition to adulthood (Brown & Emig, 1999; Osgood, Foster, & Courtney, 2010; Zweig, 2003). Most American youth move through this period experiencing little to no adversity and successfully transition into adult roles and responsibilities (Brown & Emig, 1999; Zweig, 2003). However, this is not the case for all of America’s youth. A large proportion struggle to achieve developmental goals during emerging adulthood and become disconnected from mainstream institutions and systems (Brown & Emig, 1999; Zweig, 2003).
A young person’s detachment from school and the labor market is a critical indicator that he or she may not be adequately making the transition to adulthood. Referred to as disconnected; young people who are not working and not in school may have difficulty gaining the skills and knowledge needed to become self-sufficient (Fernandes-Alcantara, 2015a). In addition, these young people are vulnerable to further failures and continued disconnection from society, often resulting in lifelong economic and social hardship (Fernandes-Alcantara, 2015a; Zweig, 2003). Several reports indicate that an estimate of 5 million disconnected youth in the United States are not in school and are not employed (Belfield et al., 2012; Fernandes-Alcantara, 2015a; Hair, Moore, Ling, McPhee-Baker, Brown, 2009). These young people are not investing in their human capital or earning income, resulting in a significant loss of economic opportunity for the nation (Belfield et al., 2012).

Relative to their connected peers, disconnected youth have a disproportionate share of problems, including chronic unemployment, poverty, mental health issues, criminal behaviors, incarceration, poor health, and early mortality (Burd-Sharps & Lewis, 2017; Fernandes-Alcantara, 2015a; Hair et al., 2009). These alarming disparities between disconnected youth and their more connected peers represent a public health concern with serious social, economic, and health implications (Mendelson, Mmari, Blum, Catalano, & Brindis, 2018). From a developmental perspective, a need exists to intervene with these young people because continuing along a disconnected path will strongly deter them from achieving optimal outcomes across the major domains of life (i.e., education, employment, and family formation; Osgood et al., 2010).

The transition to adulthood is in many respects a single process, although there are many different paths that can be taken to make a successful transition. Youthful disconnectedness is an
appropriate and useful global measure of failure in this complex social process. As a result, this allows for identification of those youth who are at highest risk of experiencing difficulties, for whom early interventions may help connect them to the social institutions and resources that can provide opportunities for growth and achievement (Brown & Emig, 1999).

**Statement of the Problem**

Youth disconnection is a social concern that initially gained attention among policy makers due to consequences associated with young adults spending a crucial period of their lives detached from the broader society (Besharov & Gardiner, 1999). The problem of youth disconnection is serious for each affected young person and society. Young people not only fail to meet their personal potential, but also cost the nation billions of dollars every year and over their lifetimes in lost productivity and increased social services (Belfield et al., 2012). In a longitudinal study conducted by Brown and Emig (1999), young people not in school or employed for at least 6 months while aged 16 to 23 had higher rates of poverty and public assistance dependency at ages 25 to 27 than did their connected peers. Furthermore, long-term (≥ 3 years) disconnected youth were 13 times more likely than their connected peers to be poor, had family incomes that were less than half the family incomes of their connected peers, and were almost 2 times less likely to marry as young adults. The researchers also found that long-term disconnected youth were more likely to continue into adulthood with difficulty in establishing strong and sustained ties to the labor force (Brown & Emig, 1999). While out of school and work, youth forego gaining experience that can lead to better employment opportunities. Furthermore, the young children of disconnected youth are at risk of growing up in poverty, which can have far reaching consequences in adulthood (Fernandes-Alcantara, 2015a).
Bynner and Parsons (2002) found that youth aged 16 to 18 who were disconnected for a period of at least 6 months were 3 times more likely than their connected peers to develop depression and other mental health disorders and 5 times more likely to have a criminal record, yet one-sixth as likely to obtain a high school or college degree. Thus, disconnected youth are more susceptible to adverse life events and face severely limited chances for future success (Brown & Emig, 1999; Burd-Sharps & Lewis, 2017). Society as a whole pays a price in terms of reduced competitiveness, lost earnings, lower tax revenues, and higher health and juvenile and criminal justice costs (Belfield et al., 2012).

Scope of Problem

Disconnected youth compose a sizable portion of the U.S. population of teenagers and young adults aged 16-24 (Mendelson et al., 2018). Measure of America, a project of the Social Science Research Council, uses data from the American Community Survey (ACS) to develop detailed reports on disconnected youth (Burd-Sharps & Lewis, 2018). Measure of America reported that the proportion of U.S. teenagers and young adults aged 16-24 who were neither employed nor in school 3 months before each survey declined from 14.7% (5.8 million) in 2010 to 11.5% in 2017 (Lewis, 2019). Although this decline represents a 20% decrease in the percentage of disconnected youth from 2010 to 2017, an estimated 4.5 million young people were still disconnected in 2017, the most recent year for which data were available (Lewis, 2019). That is, approximately 12% of the total American youth population were not in school and not working (Burd-Sharps & Lewis, 2018).

Disconnected youth have been disproportionately male, from minority groups, and have lived in low-income neighborhoods, but substantial rates have been found for all youth groups (Belfield et al., 2012; Burd-Sharps & Lewis, 2017). In 2017, the Asian youth disconnection rate
was 6.6%, the lowest among the five major racial and ethnic groups in the U.S. The Caucasian rate was 9.4%; the Latino rate was 13.2%; and the African American rate was 17.9%. Native American teens and young adults had the highest rate, 23.9%, of youth disconnection in 2017 (Lewis, 2019). Since its peak in the aftermath of the Great Recession, the number of teens and young adults disconnected from both work and school decreased over time for all major racial and ethnic groups; however, the gap between the groups with the highest and lowest rates has not narrowed. In addition, for some groups, progress has halted or even reversed in recent years. For example, the youth disconnection rate for African American teens and young adults increased between 2016 and 2017 from 17.2% to 17.9%. (Lewis, 2019; see Figure 1.1).

![Figure 1.1](http://www.measureofamerica.org)
In 2017, males were slightly more likely to be disconnected than females, 11.8% vs. 11.1%, respectively (Lewis, 2019). Over the last decades, females have stayed in school longer and performed better than males academically, on average, and this is reflected in youth disconnection trends. This pattern of lower female disconnection rates holds true for all racial and ethnic groups except for Asians, Latinos, and Native American youth (Lewis, 2019). The 2016 Measure of America data suggested that the probability of disconnection among young people was not only affected by race and ethnicity and gender, but also income and residential environment. Disconnected youth were nearly twice as likely as connected youth to live in poverty and receive Medicaid. Young people growing up in poverty face a range of challenges, such as residential segregation, poor-quality schools, inadequate transportation, greater exposure to neighborhood crime and violence, and more adverse childhood events (Burd-Sharps & Lewis, 2018). In communities where the poverty rate was below 6%, about 1 in 14 young people were disconnected; however, in communities where the poverty rate was above 21%, 1 in 5 young people were disconnected (Burd-Sharps & Lewis, 2017).

Native American youth living in households with incomes at five times the poverty line face roughly the same probability of disconnection as Caucasian youth living in households with incomes well below the poverty line and Asian Americans living in households with little-to-no income. African American youth living in households with incomes four times the poverty line were as likely to be disconnected as Caucasian youth living in households at the poverty line. While income is an important determinant of the likelihood of youth disconnection, race and ethnicity determine where groups start in comparison with one another (Burd-Sharps & Lewis, 2017).
For young people of all races, the probability of disconnection falls as household income rises (Burd-Sharps & Lewis, 2017). For example, Caucasian youth in higher income homes are less likely to be disconnected than Caucasian youth in lower income homes, and the same holds true for other racial and ethnic groups. This suggests that poverty is associated with higher rates of youth disconnection. However, African Americans, Latinos, and Native Americans are more likely to be disconnected than Caucasian and Asians given the same income level. The fact that these disparities persist even when controlling for income suggests that structural racism and discrimination may also contribute to youth disconnection (Mendelson et al., 2018). In regards to residential environments, youth disconnection in 2016 was found among 11.3% of young people in suburban areas, 12.9% in urban areas, and 19.3% in rural areas. With the national average for youth disconnection at 11.7% in 2016, 24% of the disconnected youth population were located in the rural South (Burd-Sharps & Lewis, 2018).

**Rationale for the Study**

The literature regarding socially disconnected youth is scarce, and what does exist is primarily empirical findings that link individual characteristics, such as demographic and family background to youth disconnection in early adulthood. For example, a number of studies have provided a disconnected youth demographic profile with the intent of gaining perspective on the scope of the problem and informing policy and intervention efforts (Brown & Emig, 1999; Fernandes-Alcantara, 2015a; Jekielek & Brown, 2005; Wald & Martinez, 2003). There is an even greater shortage of empirical research on the social contexts within which individual development occurs that influence problematic outcomes such as disconnectedness (Rendón, 2014). Therefore, a need exists to study the interactions between developmental processes and the social contexts in which they take place (Bynner & Parsons, 2002).
The intent of this study is to add to this body of literature by using a mixed methods approach to examine features of context that explain how youth become disconnected from education and employment. This study will implement qualitative and quantitative strands in sequence with the purpose of using follow-up quantitative data to confirm or generalize initial qualitative results (Plano Clark & Ivankova, 2016). In previous research, qualitative inquiry has been used to explore the reasons young adults become disconnected, how they support themselves financially, and the barriers to reconnecting with education and employment (Bridgeland & Milano, 2012; Miller, 2018). Qualitative investigation in this current study seeks to capture the voices of high-risk, transitioned-aged youth attending an alternative educational setting. Youth were considered high risk for continued disconnection into adulthood due to failing grades, lack of educational progress, and youths’ at-risk status for school dropout. This qualitative exploration seeks to understand the elements and experiences that influence youths’ trajectories into adulthood.

This current study is significant in that it (a) shares a perspective not often heard, the voices of young people who struggle to finish school and enter the workforce and (b) shifts the focus of youth disconnection from solely a reactive position, intervening with youth already stricken, to a focus on proactive, preventative measures. Most youth are still in school through the 11th grade (Besharov & Gardiner, 1999). Thus, up to age 16 or 17, high school settings still provide a platform for preventative services aimed at the most disadvantaged youth. Such settings are viewed as the last window of opportunity for changing a youth’s life trajectory of failure (Besharov & Gardiner, 1999; Eggert, Nicholas, & Owen, 1995). In addition, the quantitative analysis of this current study provide empirical evidence of various contextual effects relevant to the odds of becoming a disconnected young adult. The importance of studying
multiple systems simultaneously is that it allows for the investigation of joint effects and interactions between settings (Bronfenbrenner, 1977). Coupled together, this study’s approach adds to the sparse literature on youth disconnection and provides more effective and refined conclusions (Plano Clark & Ivankova, 2016).

**Purpose of the Study**

The purpose of this mixed methods study was to understand the social contextual factors and interpersonal influences that promote or impede the odds of becoming a disconnected young adult. The objectives of this study included (a) an assessment of how high-risk, African American youth describe elements and experiences in social contexts that influence their trajectories into adult roles and (b) an examination of the identified student and school-level characteristics associated with youth disconnection in early adulthood (ages 21-25). The intended results of this research are to inform federal policies and interventions that target disconnected youth or youth at risk of socially disconnecting from school and workforce participation.

**Research Questions**

1. How do high-risk, African American youth describe the educational, familial, and social processes and experiences that promote or impede academic and workforce pursuits?
2. What student-level factors (e.g., family structure, family SES, educational risk factors, educational expectations, school engagement, parental engagement, and peer affiliation) are associated with being disconnected in the young adult years?
3. What school-level factors (e.g., school size, school type, school climate, average school SES, and average sense of school belongingness) are associated with being disconnected in the young adult years?
4. What effects do student-level factors have on being disconnected in the young adult years when considering school contextual factors?

5. Does peer affiliation moderate the relationship between parental engagement and the odds of being disconnected in the young adult years?
CHAPTER 2. THEORETICAL FRAMEWORKS

In a successful transition from adolescence to emerging adulthood, youth pass through a sequence of roles involving school, work, and family formation that lead up to their becoming self-sufficient adults (Fernandes-Alcantara, 2015a; MaCurdy et al., 2006; Osgood et al., 2010). Successful paths involve numerous orderings and timings of these roles (MaCurdy et al., 2006). Many youth undergo a misstep or failure in one or more of these areas (e.g., dropping out of school, entry into foster care, involvement in the justice system, teen parenthood, lack of steady employment) without being seriously detoured from the path to independent adulthood. However, some youth spend extended periods of time outside of any role that constitutes an element of the pathway towards adult independence (Brown & Emig, 1999; MaCurdy et al., 2006).

How adolescents fare during the transition to adulthood has long-term ramifications (Osgood et al., 2010). Research shows that among the most vulnerable to making an unsuccessful transition are individuals who lack a high school degree and those detached from school and the labor market in their early adult years (Rendón, 2014). Changing the developmental trajectory of this vulnerable population has significant benefits for the individual and the broader society (Osgood et al., 2010). From a developmental perspective, this study relies on the theoretical frameworks of ecological systems theory, life course theory, and the social development model to understand youth disconnection as a behavior that is influenced by individuals’ interactions with social systems along their developmental trajectory. A synopsis of each theoretical framework is discussed followed by an application of the three theories to the current study.
Ecological Systems Theory

Ecological systems theory provides a broad approach to research on human development. Bronfenbrenner (1977, 1979, 1994) postulated that human development takes place through processes of reciprocal interaction between an individual and his or her external environment. This includes not only the immediate environment, but also larger social contexts, both formal and informal, in which these settings are embedded. Through this theory, Bronfenbrenner stressed the importance of studying an individual in the context of the entire ecological system in which growth occurs. The ecological environment is conceived as a set of nested structures, each contained within the next (Bronfenbrenner, 1977, 1979, 1994). These structures are defined as described below.

This system is composed of five socially organized subsystems that help support and guide human growth: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1994). Moving from the innermost level to the outside, the microsystem refers to the complex of relations between the developing individual and environment in an immediate setting (e.g., home, school, workplace; Bronfenbrenner, 1977, 1979, 1994). The setting is defined as a place with specific physical features in which the participants engage in activities in particular roles (e.g., daughter, student, employee; Bronfenbrenner, 1977). The mesosystem comprises the interrelations among major settings in which an individual actively participates. In other words, a mesosystem is a system of microsystems. Thus, for youth transitioning into adulthood, the mesosystem typically encompasses interactions among family, peer groups, school, and workplace (Bronfenbrenner, 1977, 1979, 1994).

The exosystem is an extension of the mesosystem embracing other specific social structures, both formal and informal. These structures include the major institutions of society.
(e.g., work environment, neighborhood, mass media, agencies of government). It comprises the linkages and processes taking place between two or more settings, at least one not containing the individual, but events occur that indirectly influence processes within the immediate setting of the individual (Bronfenbrenner, 1977, 1979, 1994). An example is the way in which a parent’s place of work indirectly influences a child by affecting the quality of life of the parent (Bronfenbrenner, 1979, 1994). The macrosystem is representative of a societal blueprint for a particular culture or subculture (Bronfenbrenner, 1977, 1994). That is, it does not refer to the specific contexts affecting an individual, but to general prototypes that set the pattern for the structures and activities occurring at the concrete level (Bronfenbrenner, 1977, 1979, 1994). The chronosystem encompasses change or consistency over time not only in the characteristics of the individual, but also of the environment in which the individual lives (Bronfenbrenner, 1994).

The next theory detailed below is an extension of ecological systems theory, in that, it expands the study of human development by focusing on social and cultural processes within historical time (Elder, 1998). From a life course perspective, timing is not synonymous with chronological age, but is a property of the surrounding environment over the life course (Elder, 1994). As such, the impact of larger contexts and distant events to the world of an individual is fundamental. This perspective explains the process by which early life events are related to later events (Elder & Rockwell, 1979).

**Life Course Theory**

Life course theory is a multidisciplinary paradigm that provides a framework for studying life pathways, developmental trajectories, and social change (Elder, 1998), in particular, how changing societal conditions and social forces influence development through life (Newman & Newman, 2007). It locates individuals in historical context, depicts their age-differentiated life
patterns in relation to this context, and highlights the continual interplay between the social course of lives and individual development (Elder & Rockwell, 1979).

Life course theory focuses on understanding changes in patterns of life and uses the concept of trajectory to understand the environmental paths followed by people in key social domains of life. Trajectory refers in context to a specific path or line of development followed by a person to a specific life outcome, regardless of whether the outcome is positive or negative (Elder, 1996; Newman & Newman, 2007). These pathways represent the most distinctive area for exploration and refer to social trajectories of education, work, and family formation that are followed by individuals and groups through society (Elder, 1998).

From a life course perspective, it is assumed that life transitions are embedded in trajectories and give them distinctive meaning and form (Elder, 1996, 1998). The multiple trajectories of individuals and their developmental implications are basic elements of the life course (Elder, 1998). As a concept, life course refers to age-differentiated life patterns embedded in social structures and cultures that are subject to historical change (Elder, 1996; Elder et al., 2003). These events and roles do not necessarily proceed in a given sequence, but rather constitute the sum total of the individual's actual experience (Elder, Johnson, & Crosnoe, 2003).

Elder (1996; 1998) identified four dominant principles in the life course approach: *interplay of human lives and historical time and place, human agency, timing in lives, and linked lives.* The principle of historical time and place states that the life course of individuals is embedded in and shaped by the historical times and places they experience over their lifetime (Elder, 1996,1998; Elder et al., 2003). The principle of human agency states that individuals construct their own life course through the choices and actions they take within opportunities and constraints of history and social circumstances (Elder, 1996, 1998; Elder et al., 2003). That is,
within the constraints of their world individuals often plan and choose among options that become building blocks of their evolving life course. Their choices are influenced by a particular situation and by their interpretations of it, as well as by their life experiences and dispositions. Individual differences and life histories interact with changing environments to produce behavioral outcomes and their correlated constraints (Elder, 1996).

A key principle of life course theory devoted to this discussion is the principle of timing of transitions. This indicates that the developmental impact of life transitions, events, and behavioral patterns vary according to their timing in a person’s life. Moreover, life events or experiences may affect individuals in different ways depending on when they occur in the life course (Elder, 1998; Elder et al., 2003). The principle of linked lives reveals that human lives are lived interdependently and that social and historical influences are expressed through this network of shared relationships (Elder, 1996, 1998; Elder et al., 2003). This principle extends beyond interdependence to the interlocking trajectories of individuals and their sequence of transitions. Interlocking trajectories are especially prominent in the transition to adulthood (Elder, 1996). The idea of linked lives is central to the ecology of human development (Bronfenbrenner, 1977, 1979, 1994). The final theory detailed below explains the behavior of youth disconnection from important social institutions.

**Social Development Model**

The social development model (Catalano & Hawkins, 1996) is a general theory of human behavior that specifies the role of developmental processes in predicting outcomes of both prosocial and problem behaviors (Catalano & Hawkins, 1996; Choi, Harachi, Gillmore, & Catalano, 2005). This model seeks to explain and predict the onset, escalation, maintenance, de-escalation, and cessation from patterned behaviors that are of concern to society (e.g., youthful
This antisocial behavior is outside of the normative consensus regarding acceptable social behavior. In this model, behaviors are subject to influence from a variety of developmentally appropriate contexts. The same principles, factors, or processes that influence one behavior should predict other behaviors (Catalano & Hawkins, 1996).

The social development model is a synthesis of three different theories that attempt to explain variation in problem behavior among youth (Catalano & Hawkins, 1996; Choi et al., 2005; Fleming, Catalano, Oxford, & Harachi, 2002). It uses elements of control theory to identify factors that cause the development of behaviors; elements from social learning theory to find factors that either extinguish or maintain behaviors; and elements from differential association theory to identify parallel, but separate causal paths for prosocial and antisocial processes. The goal of this synthesis is to provide more explanatory power than those of its component theories (Catalano & Hawkins, 1996).

The general model hypothesizes that individuals learn patterns of behavior, whether prosocial or antisocial, primarily from socializing units of family, school, religious and other community institutions, and peers (Catalano & Hawkins, 1996; Choi et al., 2005; Fleming et al., 2002). According to the social development model, individuals are socialized through processes involving four constructs that can serve as either risks or protective factors: (1) perceived opportunities for involvement in activities and interactions with others, (2) the degree of involvement in activities and interactions, (3) the skills to participate in this involvement and interaction, and (4) the reinforcement they perceive from this involvement and interaction (Catalano & Hawkins, 1996; Elizabeth Kim, Oesterie, Catalano, & Hawkins, 2015; Fleming et al., 2002). These constructs are hypothesized to be ordered causally, with more perceived opportunities for involvement leading to more actual involvement, which in turn leads to more
rewards and recognition. Skills are also hypothesized to affect the amount of rewards and recognition an individual receives (Fleming et al., 2002).

When these socializing processes are consistent, a social bond of attachment and commitment develops between the individual and the socializing unit. Once established, the social bond inhibits behaviors inconsistent with the beliefs held and behaviors practiced by the socialization unit through establishment of an individual’s stake in conforming to the norms, values, and behaviors of the socializing unit to which he or she is bonded. The more strongly an individual is bonded to a socializing unit, the more likely he or she is to adopt its beliefs and values. This commitment, in turn, influences future behavior. It is hypothesized that the behavior of the individual will be prosocial or antisocial depending on the predominant behaviors, norms, and values held by those individuals or institutions to whom the individual is bonded (Catalano & Hawkins, 1996; Choi et al., 2005; Fleming et al., 2002).

**Application of Theories to the Study**

Ecological systems theory provides a framework that guides methodological approaches to the study of social disconnectedness. It provides a context for investigating the behavior and development of individuals as a function of their exposure to different social settings. The importance of studying multiple systems simultaneously is that it allows for the investigation of joint effects and interactions between settings thereby highlighting the possibility that events in one setting may influence an individual’s behavior and development in another (Bronfenbrenner, 1977). Thus, the experience of a youth in the home environment, the school setting, or in the informal peer group may change his or her pattern of activities and interactions with others with consequent implications for life outcomes.
Life course theory provides a framework that guides research on matters of problem identification and conceptual development (Elder, 1998). At its core, the life course perspective insists that development is lifelong and that no life stage can be understood in isolation from others (Johnson, Crosnoe, & Elder, 2011). For example, in the dropout literature, researchers using longitudinal data spanning both childhood and adolescence have supported their work within a life course framework and looked for antecedents of dropout during the elementary and middle school years (Dupéré, Leventhal, Dion, Crosnoe, Archambault, & Janosz, 2015).

Therefore, adolescence can buffer against early disadvantages or other childhood experiences in ways that affect adulthood. Experience in adolescence may also provide turning points that deflect earlier behavioral trajectories, and the unfolding of adolescence may allow for accumulation of prior life advantages and risks that send young people on divergent paths into and through adulthood. As applied to early adulthood, outcomes such as youth disconnection can be fully understood in light of previous childhood and adolescence experiences and outcomes (Johnson et al., 2011). Furthermore, viewing disconnected youth and the psychosocial problems they typically encounter within the life course perspective improves understanding of both adolescence and this transitional period.

The social development model provides a useful framework for understanding risk and protective factors and how risk and protective processes contribute to youth development over time across multiple socializing units (Elizabeth Kim et al., 2015). The model specifies the role of developmental processes in predicting outcomes of both prosocial and problem behaviors (Catalano & Hawkins, 1996; Choi et al., 2005). Socialization is a fundamental component of the model and individuals with whom youth interact across the contexts of their lives exert a powerful developmental influence (Catalano & Hawkins, 1996). Thus, understanding
interactions within different contexts, particularly the most salient socializing unit, can improve prediction of youth disconnection.
CHAPTER 3. REVIEW OF LITERATURE

Youth disconnection is widespread in American society with debilitating outcomes for each affected young person. This chapter focuses on a review of the literature pertinent to youth disconnection beginning with a discussion of a distinct period of the life course for teens and young adults. This review provides the historical context, defining features, and methodological background for studying socially disconnected youth. Risk factors across five domains that contribute to a youth’s disconnected status in early adulthood are reviewed, as well as protective factors that mitigate against risk. The review highlights federal policies that affect education and employment pathways and describe strengths and unintended consequences from policy implementation. The literature review continues with an overview of programs and interventions targeted at serving disconnected youth, reviews treatment outcomes, and provides a synthesis of effective practices and approaches. This review concludes with implications for the current study.

Emerging Adulthood

In the U.S., the conceptualization of the transition to adulthood is distinctly different compared to previous generations (Ladhani, Cullen, Dawes, & Dimitropoulos, 2019). The timeframe within which this transition occurs has extended, with many young people relying on parents for both financial and social support for longer periods of time, well into their twenties (Goodkind, Schelbe, & Shook, 2011). According to social science research, multiple factors such as the delayed age of first marriage, the high cost of living independently, challenges in labor market access, and additional educational opportunities have extended this period of transition from adolescence to adulthood (Arnett, 2000; Fernandes-Alcantara, 2015a). This extended transition period is often referred to in the literature as “emerging adulthood,” and is recognized
as a distinct period of the life course for young people (Arnett, 2000). Emerging adulthood is characterized by change and exploration for youth, as they examine the life possibilities open to them. This developmental period, from the late teens through the early 20s, focuses on youth ages 18-25 and is theoretically distinct from adolescence and young adulthood. It is distinguished by relative independence from social roles and normative expectations. That is, young people find themselves having left the dependency of childhood and adolescence, yet not having entered the enduring responsibilities that are normative in adulthood (Arnett, 2000). Successful development is often measured as gaining competence in tasks within the following domains: education, employment, housing, mental and physical health, and social relationships (Baggio, Studer, Iglesias, Daeppen, & Gmel, 2017; Gomez, Ryan, Norton, Jones, & Galán-Cisneros, 2015).

The emerging adult phase is a pivotal time in life for youth. For connected young people, it is a time marked by positive firsts including obtaining the level of education and training that provides the foundation for their income and occupational achievements and establishing mentoring relationships with trusted adults outside the family circle. Through these experiences connected youth develop cognitive skills, gather academic credentials, develop soft skills (e.g., cooperation), build professional relationships, and come to understand what pursuits they enjoy, excel at, and value. They learn how the world works and what their role in it might be (Burd-Sharps & Lewis, 2018).

On the other hand, disconnected young people are robbed of these critical and affirming experiences. Loneliness, self-doubt, depression, isolation, unhealthy behaviors, and anxiety about the future are common among those who have left school and are unemployed. The limited education, social exclusion, lack of work experience, and minimal professional networks that are
part of social disconnection have long-term consequences that snowball through the years affecting a range of well-being outcomes (Burd-Sharps & Lewis, 2018). With increasing recognition of this emerging adult phase, it is troubling that systems and structures continue to utilize primarily legal definitions of childhood and adulthood, enforcing strict age boundaries which do not take into account the common complexities of this developmental period (Fowler, Toro, & Miles, 2011).

### Disconnected Youth

#### Historical Background

A large portion of research on disconnected youth originated from international studies taken place in Europe and, to a lesser extent, Asia. In contrast to the international focus on disconnected youth, relatively little attention has been paid to this group in the U.S. In addition, most of the research on disconnected youth has appeared in policy position papers rather than peer-reviewed literature (Bray, Depro, McMahon, Siegle, & Mobley, 2016).

In the U.S., disconnected youth gained increasing attention among policy advocates and social science researchers, particularly after the Great Recession (2007-2009; Belfield et al., 2012; Burd-Sharps & Lewis, 2012, 2017). After a decade of relatively stable rates, the rate of youth disconnection swelled by over 800,000 young people between 2007 and 2010 (Burd-Sharps & Lewis, 2012). The latest data indicate that the youth disconnection rate has fallen to 11.7%, a significant drop from the 2010 post-recession high of 14.7, or 5.8 million young people (Burd-Sharps & Lewis, 2018). Although strides have been made in reducing the youth disconnection rate since the recent Great Recession, the overall U.S. rate is still nearly twice that of Germany (Burd-Sharps & Lewis, 2017).

According to Fernandes-Alcantara’s (2015a) trend analyses, rates of disconnection for
youth 16 to 24 follow economic cycles, as expected. Over the past 27 years (1988 through 2014), three economic recessions occurred (July 1990 to March 1991; March 2001 to November 2001; and December 2007 to March 2009). In each case, disconnection rates rose with the onset of economic recession, and continued to rise post-recession before falling. However, a definitive understanding of the scope of the problem is complicated by the failure to distinguish between disconnected youth and unemployed youth (Fernandes-Alcantara, 2015a).

According to the U.S. Bureau of Labor Statistics (2014), unemployed youth refers to youth who do not have a full- or part-time job, but are actively seeking and available for work. Youth not employed and not looking for work are considered out of the labor force (BLS, 2014). Disconnected youth are young people who are simultaneously not in school and not working and are considered to be a subset of those out of the labor force (Bray et al., 2016; Burd-Sharps & Lewis, 2018).

**Defining Disconnected Youth**

Disconnected youth are teenagers and young adults who are separated from the people, institutions, and experiences which would assist them in developing the knowledge and skills needed to transition to adulthood (Fernandes-Alcantara, 2015a). This population is also referred to as “opportunity youth” because of the potential for positive economic impact when youth are supported on pathways to self-sufficiency (Belfield et al., 2012; Mendelson et al., 2018). In addition, “youth in transition” and “youth aging out” are terms applied to this population to refer to common experiences of many in exiting institutional care such as the foster care system or the juvenile justice system (Youth.Gov). Internationally, disconnected youth are referred to as “NEET,” a government acronym for not in employment, education, or training. The term NEET is utilized to combine categories of labor and social exclusion (Sadler, Akister, & Burch, 2015).
The first challenge any empirical researcher encounters in studying youth disconnection involves specifying a clear definition (MaCurdy et al., 2006). Since the late 1990s, social science research has introduced different definitions of the term disconnected youth due to varying methodological approaches (Fernandes-Alcantara, 2015a). Broadly, disconnection has been seen as a status when youth are not employed and not involved in educational activities for extended periods (MaCurdy et al., 2006). The most commonly used definition for disconnected youth includes teenagers and young adults between the ages of 16 and 24, who are neither in school nor working (Belfield et al., 2012; Burd-Sharps & Lewis, 2017; Fernandes-Alcantara, 2015a; Treskon, 2016).

This definition characterizes a particular form of economic inactivity because youth are not accumulating human capital in school or college or through labor market skills by working (Belfield et al., 2012). Human capital refers to collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value (Blundell, Dearden, Meghir, & Sianesi, 1999). Policy studies have employed this definition to focus on measurable factors that can be used to understand the extent of youth disconnection at the period of time examined (Zweig, 2003); thus, generating disconnected youth profiles to inform policy, which in turn informs the type of intervening services needed (MaCurdy et al., 2006).

Many studies have used different iterations of this definition by adjusting for the period of time examined, age of youth, and incorporating other characteristics or defining features. For example, MaCurdy et al. (2006) considered youth ages 12 to 17 disconnected if they met the criteria in the first month they were surveyed and in at least eight of the eleven following months. Besharov and Gardiner (1999) incorporated military service and marital status and examined the duration of disconnectedness. These researchers’ definition included youth who
were not enrolled in school, not employed, not in the military, and who were not married to someone who met at least one of these criteria for 26 weeks or more in a one-year period (Besharov & Gardiner, 1999). This definition incorporates the role of marriage in the transition process. For example, married women, particularly with young children, may choose to withdraw from the labor force for some time and depend on a spouse for financial support. Failure to highlight this choice would result in an overestimation of disconnected youth (MaCurdy et al., 2006).

An example of a more expansive definition was provided through the U. S. Consolidated Appropriations Act of 2014. Disconnected youth is defined as low-income individuals between the ages of 14-24 who are either homeless, in foster care, involved in the juvenile justice system, unemployed, or not enrolled in or at risk of dropping out of an educational institution (GAO, 2017; Riley, 2014). This definition targets a wide range of youth and incorporates a preventative approach that could use social institutions to provide intervening services (Besharov & Gardiner, 1999). Fernandes-Alcantara (2015a) constructed a definition of disconnection that included noninstitutionalized youth ages 16-24 who were not working or not in school at the time of the survey and did not work or attend school anytime during the previous year. This definition is narrower, but captures youth who were unemployed and not in school for a longer period of time. This is intended to exclude youth who may, in fact, be connected part or most of a year (Fernandes-Alcantara, 2015a).

Disconnected youth have been further categorized as either chronic, referring to no school or work after age 16, or under-attached, where despite some schooling and work experience beyond 16, these youth have not progressed through college or secured a stable attachment to the labor market. Both groups are failing to build an economic foundation for adult
independence (Belfield et al., 2012). Despite the variations in definitions, terms used, and categorizations, these young men and women are detached from or at risk of detachment from educational and employment opportunities required for rewarding, productive lives. In addition, they could potentially be cut off from critical resources and experiences that foster feelings of dignity and belonging (Burd-Sharps & Lewis, 2017).

One major limitation that the varying definitions do not account for is that of informal markets and social networks as criteria to assess productivity outside of formal networks. Although informal networks are likely unstable and may not necessarily lead to longer-term employment or attachment to school, they should be considered as these networks can provide cash assistance and temporary housing and employment, among other supports (Fernandes-Alcantara, 2015a).

**Methodological Background and Findings**

This researcher surveyed the social science literature from 1999 through 2019 on disconnected youth, and found 12 relevant studies. These studies were identified through electronic databases (ERIC, Psychology & Behavioral Sciences Collection, and Social Sciences Citation Index); google search using search terms such as “disconnected youth,” “youth disconnection,” “opportunity youth,” and “vulnerable transitioning youth” and reviewing reference pages in a few of the studies. Nine of the twelve studies were carried out by federal agencies or non-governmental organizations. Below is a brief overview of the studies’ methodologies and key findings.

Across the studies, estimates of the number of disconnected youth varied because of their methodology, the age range of youth, and the period of time examined. Some of the studies were cross-sectional (n=4), meaning that they considered youth to be disconnected at a particular point
in time (Bridgeland & Milano, 2012; Fernandes-Alcantara, 2015a; Jekielek & Brown, 2005; Wald & Martinez, 2003). The majority, however, were longitudinal (n=5) and tracked a youth’s connection to work and school over multiple years (Besharov & Gardiner, 1999; Brown & Emig, 1999; Hair et al., 2005; Hair et al., 2009; Rendón, 2014). The remaining studies (n=3) either did not provide detailed information about the methodology used (MaCurdy et al., 2006), employed mixed methods strategies (Miller, 2018), or qualitative inquiry (Pozzoboni, 2015). Of the quantitative analyses, studies used varying data sets including the National Longitudinal Survey of Youth (1979 cohort [NSLY79] and 1997 cohort [NSLY97]), National Longitudinal Study of Adolescent Health (Add Health), and Current Population Survey (CPS), among others. Most of the studies did not provide actual numbers of disconnected youth, and instead reported percentages. Percentages ranged from 7%-14% of the youth population, depending on the ages of the youth and methodology.

The studies counted youth as young as age 16 and as old as age 24, with ages in between (e.g., 16 to 21, 16 to 23, 18 to 24). One exception was a qualitative study that counted youth between the ages of 13 and 20 (Pozzoboni, 2015). The definition of disconnected youth varied considerably in the studies, but the underlying conceptualization involved youth not employed and not involved in educational activities for extended periods of time. In all studies that examined gender, rates of disconnection for males and females were inconsistent. According to one analysis of NLSY97, disconnected youth included individuals ages 16-21, and not in school, not employed, not in the military, and not married to someone who met criteria for 26 weeks or more out of a calendar year (Hair, Moore, McPhee, & Brown, 2005). The study found that during a 5-year period, from 1997 to 2001, approximately 13.5% of youth met this definition annually. Furthermore, there was an equal share of males and females likely to be disconnected,
13.6% and 13.4%, respectively. In a previous analysis of NLSY79 data, females were more likely to be disconnected than males utilizing the same definition as previously mentioned, but the analysis focused on youth ages 16-23 (Besharov & Gardiner, 1999). Similarly, Fernandes-Alcantara (2015a) found that females were more likely to be disconnected than males using the CPS data with analysis focusing on youth ages 16 to 24. These findings indicate a higher frequency of disconnected females in latter ages of emerging adulthood (i.e., ages 22-24). Of the studies that examined race and ethnicity, Caucasian and Asian youth were less likely to be disconnected than their counterparts of other racial and ethnic groups.

Risk and Protective Factors Associated with Youth Disconnection

Risk factors are conceptualized as conditions or variables associated with a higher likelihood or probability of a negative or undesirable outcome (Bender & Lösel, 1997; Greene & Conrad, 2002; Jenson & Fraser, 2016). In the youth disconnection context, risk factors when present are associated with an increased likelihood of becoming a disconnected young adult (Hair et al., 2009; Rendón, 2014). In the last two decades, researchers and practitioners have become increasingly interested in understanding protective factors in the study of youth development (Fraser, 2004). Protective factors generally describe the conditions that mitigate the effects of risks and are associated with a higher probability of a positive or desirable outcome (Greene & Conrad, 2002). In the reviewed literature regarding socially disconnected youth, key risk and protective factors have been assessed across five major domains: individual, family, school, peer group, and community as discussed below. Although family is an early influence on youth development, schools and peers become more influential during the emerging adult phase (Catalano & Hawkins, 1996).

The factors that contribute to youth disconnection are not entirely clear, but previous
research has shown the linkages between demographic risk factors (e.g., race and ethnicity, gender, age, parental education and employment, receipt of public assistance, and family structure) and disconnection (Fernandes-Alcantara, 2015a; Hair et al., 2005; Hair et al., 2009; MaCurdy et al., 2006). In addition, Hair et al. (2009) found that poor grades, poor health, and associating with peers who use drugs or get into trouble all raised the risk of becoming disconnected in the early adult years. Family processes characterized by family routines, parental monitoring, parental religiosity, and mother/youth relationship had no predictive ability on their measurement of youth disconnection (Hair et al., 2009). On the other hand, parental involvement in school lowered the likelihood of youth becoming disconnected. More specifically, youth whose parents attended PTA meetings and volunteered to help at school were 11% less likely to become disconnected than youth whose parents were not involved in school (Hair et al., 2005).

It seems likely that these specific forms of parental involvement are artifacts of a broader investment of time and values in their children’s school activities that are characteristic of these parents, and such involvement may be associated with level of parents’ education (see Kumar, O’Malley, & Johnston, 2014).

Rendón (2014) examined school and neighborhood contextual factors in relation to the likelihood of being disconnected in the young adult years. Results revealed that attending schools with a higher proportion of African American students served as a risk factor. Notable protective factors were having a high grade point average or having a mentor as these factors significantly lowered the likelihood of being disconnected. In regards to neighborhood effects on the odds of being disconnected in the young adult years, only median age of the neighborhood was found to be statistically significant. That is, a higher median age in the neighborhood was associated with lower odds of being disconnected (Rendón, 2014). This suggests that neighborhoods with high
numbers of very young parents would tend to have more disconnected youth, further 
perpetuating the cycle of poverty and youth disconnection.

The Ways Youth Disconnect

While the factors leading to disconnection vary, certain youth are at higher risk, including 
those who left high school without a diploma, current and former foster youth, homeless youth, 
and court-involved youth (Bridgeland & Mason-Elder, 2012; Zweig, 2003). In addition, the 
disconnected population includes youth with an incarcerated parent, teen mothers and fathers, 
and youth in families with limited English capability. Issues such as these not only serve as ways 
youth become disconnected, but also contribute to them remaining disconnected (Zweig, 2003).

Race, School Effects, and Youth Disconnection

Youth disconnection runs throughout society and is a problem for youth of all racial and 
ethnic groups (Besharov & Gardiner, 1999); however, minority groups are affected at 
disproportionately higher rates (Belfield et al., 2012). As such, this racial dimension further 
complicates the problem. The history of blatant racial discrimination and salient examples of 
continuing discrimination further incites the bitterness of many minority groups against systems 
and institutions, particularly the educational system (Lerman, 1999). Early negative experiences 
in school set in motion a cascade of disadvantage, which negatively influence youth as they 
transition to adulthood (Chen & Kaplan, 2003).

Youth who have dropped out of school or have been pushed out experience disconnection; and often represent demographic groups that have been historically marginalized in educational settings and society (Flennaugh, Cooper Stein, & Andrews, 2018). Such 
vulnerable youth may have been driven out of their prior schools by negative experiences with 
educators holding deficit mindsets about their academic potential, their motivation for education,
and their families’ commitment to education. Educators who embody these negative mindsets believe that, when marginalized groups do not perform well in school, the cause is something inherent in the student, their culture, or their family as opposed to structures and conditions in society, schools, and classrooms that can impede student success (Milner, 2012). As a result, educators with deficit mindsets are unlikely to hold all students to high expectations and provide necessary supports for all students to succeed because they do not expect success for all students (Flennaugh et al., 2018). The evidence of continuing discrimination reinforces the rejection by minority youth of the mainstream system and rationalizes their lack of effort in school (Lerman, 1999).

Although schools are not primarily responsible for the weak educational achievement of disconnected youth, the structure of the school systems and how this interacts with the job market can weaken the motivation of young people, especially the economically and socially disadvantaged. Performing well in school does not necessarily translate into good jobs. The link between school and careers is largely absent for the vast majority of disadvantaged youth. These students rarely have a good idea about a wide range of mid-level careers and what skills are required to succeed in those careers. Their schools are largely failing to provide economically disadvantaged youth with what they need and what employers demand for entry-level jobs with career possibilities (Lerman, 1999). Bridgeland and Milano (2012) evaluated the voices of disconnected youth and found that 77% agreed that getting a good education and job was their responsibility, but many said they either did not know how or did not have the education, skills, or work experience to do so. Enhancing the educational and employment success of marginalized groups is critical in the reduction of high poverty rates, family disruption, and alienation (Lerman, 1999).
Federal Policy and the Expansion of Youth Programs

Policies affecting disconnected youth span a range of systems and focus predominately on pathways to education and employment attainment (Treskon, 2016). A significant federal policy that set the groundwork for educational and workforce opportunities for marginalized youth was the Civil Rights Act of 1964 (Public Law 88-352) signed by President Lyndon Baines Johnson. This landmark civil rights and U.S. labor law ended segregation in public places and banned employment discrimination based on race, color, religion, gender, or national origin. Title VI of the Civil Rights Act prohibited discrimination based on race, color, or national origin in public schools. It authorized the Commissioner of Education to arrange for support for institutions of higher education and school districts to provide in-service programs for assisting instructional staff in dealing with transitions due to desegregation (USDEb). The Civil Rights Act provided a mechanism to withhold federal funding and gave the Justice Department the authority to file class action litigation against noncompliant school districts (Hilbert, 2017). This regulation continues to be enforced by the Department’s Office of Civil Rights (USDEb).

In addition to the legislation, new government policies and educational programs designed to give preference to members of groups victimized by racial discrimination were implemented to remedy the injustices created by hundreds of years of oppression. Moreover, decisions by the Supreme Court demanded that school districts transition to unitary, racially nondiscriminatory systems, and lower courts issued orders and decrees that effectively implemented the transition, both of which set strides toward equal access and opportunity (James, 2015). The remaining discussion on the federal policy landscape is divided into two parts: education and workforce.
Education Policy

The education policy consists of three categories: K-12 elementary and secondary education, K-12 career and technical education, and K-12 alternative school programs.

**K-12 elementary and secondary education.** Every Student Succeeds Act (ESSA) was signed by President Barack Obama on December 10, 2015. This bipartisan measure reauthorizes the Elementary and Secondary Education Act (ESEA) of 1965, the nation’s national education law and longstanding commitment to equal opportunity for all students. ESEA was signed into law in 1965 by President Lyndon Baines Johnson who believed that full educational opportunity was a priority (USDEa). ESEA was historic in its attempt to leverage federal resources to eradicate educational inequity among the nation’s poor (CLASP, 2015). From its inception, ESEA was a civil rights law that provided funding for school districts with guidelines set by administration to adhere to desegregation legislation (Hilbert, 2017). ESEA offered federal funding to educational districts serving low income students, funding for textbooks and library books, funding for special education centers, and scholarships for low-income college students. Additionally, the law provided federal funding to state educational agencies to improve the quality of elementary and secondary education (USDEa). This legislation and the executive branch’s interpretation and enforcement seemed to rejuvenate efforts in the court system to affirm integration during the desegregation era (Hilbert, 2017).

The premises of this current act is to further expand educational opportunity and improve student outcomes for some of the most marginalized youth and young children. ESSA includes many provisions that are set to help ensure success for all students to include advances in equity by upholding critical protections for disadvantaged and high-needs students; the requirement that all students be taught to high academic standards that will prepare them to succeed in college and
careers; and assistance to support and grow local innovations including evidence-based and place-based interventions developed by local leaders and educators. In addition, this act maintains an expectation that there will be accountability and action to affect positive change in low-performing schools (USDEa). ESSA supports effective dropout prevention strategies such as afterschool programs and community schools. ESSA also requires states to specify how they will effectively transition students from middle school to high school and from high school to postsecondary education. Both periods are critical to ensuring students graduate from high school and successfully transition into adulthood. In addition, the legislation strengthens support for justice-involved youth by requiring state plans to ensure greater coordination between local education agencies and correctional facilities (CLASP, 2015).

The previous version of the ESSA law was the No Child Left Behind (NCLB) Act enacted in 2002 by President George W. Bush. NCLB enhanced the notion of accountability to ensure a quality education for all children regardless of race, income, zip code, disability, home language, or background (USDEa). The act promoted increased accountability for educational agencies by mandating that all students reach proficiency goals. Furthermore, NCLB required states to assess and report the progress of all students in achieving proficiency (Mongiello, 2011). It represented a significant step forward in revealing where students were making progress and where they needed additional support. However, NCLB’s prescriptive requirements presented challenges for schools and educators. Recognizing this fact, in 2010, the Obama administration focused on enhancing the law with a clear goal of fully preparing all students for success in college and careers (USDEa).

**K-12 career and technical education.** On July 31, 2018, President Donald Trump signed into law the reauthorization of the Carl D. Perkins Career and Technical Education
(Perkins IV) Act of 2006, renamed the Strengthening Career and Technical Education for the 21st Century (Perkins V) Act. The Carl D Perkins Career and Technical Education Act has provided federal support to state and local career and technical education (CTE) programs to help prepare high school and community college students with the knowledge and hands-on experience necessary for jobs in a broad range of industries. However, that version of the law was outdated and no longer reflected the realities and challenges facing learners, educators, and employers. In particular, the previous policy restricted the ability of state leaders to invest federal resources in efforts that prioritize economic growth and local need (CEW, 2018).

Building on recent reforms to K-12 education and the workforce development system, Perkins V should help more youth enter the workforce with the knowledge and skills needed to compete for high paying, in-demand jobs in industries critical to the nation’s economy. This new legislation is intended to help low-income youth access economic opportunity by giving state leaders more flexibility to direct federal resources to CTE programs that can provide students with skills to fill available jobs in their states and communities. In addition, Perkins V promotes work-based learning and evaluates CTE providers on their ability to effectively prepare students for the workforce. At the secondary level, this legislation streamlines performance measures used to evaluate CTE programs and aligns these performance measures with those set by each state under ESSA and at the postsecondary level, it streamlines performance measures to align with performance measures in the workforce development system (CEW, 2018).

Provisions in the Perkins V allow school districts to use federal funds to provide all students, not just those enrolled in CTE, career exploration and development activities in the middle grades and comprehensive guidance and academic counseling in the upper grades. Perkins V removes the U.S. Department of Education (DOE) from negotiating state performance
levels for student academic attainment outcomes, leaving it to states and their stakeholders to determine their performance goals. Perkins V also updates and expands its definition of “special populations” to include homeless individuals, foster youth, those who have aged out of the foster care system, and youth with a parent who is on active duty in the armed forces. The new law also increases the amount states may spend on students in state correctional systems, and increases the amount states may set aside in a special reserve fund to focus on rural areas, areas with high numbers or concentrations of CTE programs, or areas with gaps or disparities in performance (USDEc).

**K-12 alternative school programs.** Alternative school programs offer students at risk of dropping out and those who have already left school an opportunity to achieve in a setting outside of the traditional public school environment by providing tailored educational options. While there is variation in how alternative schools operate at the local levels, many public school-based alternative settings are often characterized by their flexible schedules, smaller student-teacher ratios, career-oriented themes, and innovative curricula (Martin & Brand, 2006).

At the federal level, an alternative school program is defined as a public elementary or secondary school that addresses the needs of students that typically cannot be met in a regular school setting (Porowski, O’Conner, Luo, 2014). This definition has typically included homeschooling, general educational development programs, and charter schools (Aaron, 2006). This discussion focuses on school-based alternative settings which serve to reengage disconnected youth through creating multiple pathways to success in education and training. It excludes alternative school programs used by many school districts as a short-term disciplinary intervention.

The policy landscape for alternative school programs is fragmented as there is no unified
legislation for alternative education at the federal level. In addition, no federal agency has primary responsibility for alternative education or the youth involved in non-traditional education. A number of federal agencies administer programs that can be accessed by alternative education programs that are associated with the K-12 public education system and the workforce development systems under policies including ESSA, Perkins V, and the Workforce Innovation and Opportunity Act. Several federal agencies have taken responsibility for dealing with certain youth who participate in alternative education (e.g., juvenile justice involved youth or foster youth), but no agency’s mission is designed to focus on all youth involved in alternative education (Martin & Brand, 2006).

**Employment Policy**

Past research has shown that disconnected youth tend to reconnect first with employment, as opposed to education (Treskon, 2016). For example, a study conducted in 2009 revealed that among young people who reconnected, 77% got jobs, 17% went back to school, and smaller percentages got married or joined the military (Hair et al., 2009). This research reveals that disconnected youth need access to opportunity to connect to employment and career pathways. The following discussion highlights federal legislation that impacts employment and workforce development.

The 1973 Comprehensive Employment and Training Act (CETA) was the first of four laws enacted during the 1970s and 1980s that focused greater federal attention on youth employment and training. The second law, the Youth Employment and Demonstrations Project Act (YEDPA) was enacted in 1977 and established a variety of employment, training, and demonstration programs for youth. The 1982 Job Training Partnership Act (JTPA) reauthorized CETA. JTPA was subsequently reauthorized by the Workforce Investment Act (WIA) of 1998.
Separately, the School-to-Work Opportunities Act of 1994 (STWOA) supported the development of programs that encouraged students to pursue learning opportunities and experiences that incorporated occupational skills. Activities authorized under these acts were administered by DOL. STWOA was additionally carried out by DOE (Fernandes-Alcantara, 2015b).

The Workforce Innovation and Opportunity Act (WIOA), which replaced WIA, affects employment and training services for disconnected youth ages 16-24 (Treskon, 2016). WIOA was signed into law on July 22, 2014 by President Barack Obama and changes took effect July 1, 2015. It is the first legislative reform in 15 years of the public workforce system. Like WIA, WIOA includes titles that authorize programs for job training and related services (Title I), adult education and literacy (Title II), employment services (Title III), and vocational rehabilitation (Title IV). The major job training programs for youth and other workers are authorized in Title I (Fernandes-Alcantara, 2015b).

WIOA is designed to help job seekers access employment, education, training, and support services to succeed in the labor market. It also ensures that employment and training services provided are coordinated and complementary so that job seekers acquire skills and credentials that meet employers’ needs (USDL). It places heightened emphasis on the alignment of programs that serve out-of-school youth. It requires that a higher percentage of youth funds go to programs serving this population, from 30% to at least 75% (Bridgeland, Ingram, & Atwell, 2016; USDL). In addition, 20% of funds must be spent on work experience activities such as summer jobs, pre-apprenticeships, on-the-job training, and internships so that youth are prepared for employment (USDL). With this reauthorization, youth activities designated to youth ages 16-21 have raised the age of eligibility to include youth up to age 24 (Bridgeland et al., 2016).
WIOA also relaxed eligibility requirements that would make it easier for disadvantaged young people to benefit from WIOA funding (Bird, Foster, & Ganzglass, 2014). For example, young people can meet the low-income eligibility criteria by living in a high-poverty area; they do not have to prove that they themselves come from low-income families. WIOA also added some required program elements such as financial literacy training and preparation for postsecondary education. Also, WIOA changed standards used to measure program performance to include measurable skill gains. This change encourages programs to serve populations with low skill levels (Treskon, 2016).

**Current Legislative Impacts**

This discussion focuses on ESSA and WIOA, the most recent legislation that impacts the educational and workforce domains for disconnected youth, and highlights the strengths and unintended consequences of each. ESSA provides provisions to ensure success for all students with a requirement that they are taught at high academic standards that prepares them to succeed in college and careers. In addition, there is an expectation that there will be accountability and positive change in low-performing schools (USDEa). However, these provisions do not automatically cross over to youth attending alternative education programs. School-based alternative education programs house the most academically disadvantaged youth, but lack a unified legislation at the federal level. There is no governing agency responsible for dealing with youth who participate in alternative education and therefore, there is no governing agency to ensure quality education for this population of youth. This remains a persistent problem in alternative education services (Martin & Brand, 2006).

WIOA provides employment and training services for disconnected youth (Treskon, 2016). It places heightened emphasis on the alignment of programs that serve out-of-school
youth and requires that a higher percentage of youth funds go to programs serving this population (Bridgeland et al., 2016; USDL). While WIOA increases funding for services for disconnected youth, how individual states implement it determines the magnitude of its impact. For example, WIOA requires that more funds go towards youth who are not in school, but leaves it to states to define that population. Depending on how each state defines this population, young people who have dropped out of school but have subsequently re-enrolled in an alternative school may not be eligible for WIOA funds. While WIOA stipulates that young people enrolled in YouthBuild or Job Corps may be counted as out-of-school, young people in similar programs may not be eligible under the WIOA definition.

**Intervention Research**

Policy and intervention work side by side as the implementation of policy impacts how programs and interventions function. Multiple federal agencies play a role in providing funding and assistance to local programs that serve disconnected youth (GAO, 2008, 2017). Two agencies in particular, the U.S. DOE and the U.S. DOL play critical roles in funding youth-serving programs with a goal of reconnecting youth (GAO, 2008). Broadly, DOE’s various related grant programs facilitate youth enrollment and success in school and vocational programs and DOL’s workforce programs provide funding for both workforce training and alternative education services (GAO, 2008). As such, the functionality of these programs are influenced by federal legislation.

The following section of the literature review examines programs and interventions targeted at serving disconnected youth with the goal of reconnecting them to education, job training and workforce, and community service. The search for solutions to the problem of social disconnectedness must account for the diversity within the population of disconnected youth.
This group of 16 to 24 year olds, for example, includes young people with a high school degree or equivalency who are not seeking work or not furthering their education, those who left high school without earning a degree, and those facing specific challenges such as child care responsibilities, substance abuse, or involvement with the juvenile or criminal justice systems (Manno, Yang, & Bangser, 2015). The discussion on programs and interventions serving disconnected youth is divided into four main sections: (1) employment-focused programs, (2) education-focused programs, (3) comprehensive youth programs and (4) case management and therapeutic interventions. This section concludes with current efforts targeted at serving disconnected youth and a summary of effective interventions.

**Employment-Focused Programs**

The most common stereotype portrays disconnected young people as being uniformly high school dropouts, but according to Bridgeland and Milano (2012), 40% of the disconnected youth surveyed already had a high school diploma or equivalency credential. Although they had completed their secondary education, they were not connected to employment or postsecondary education. The same survey found that regardless of their education levels, more than half of disconnected youth were looking for full-time jobs (Bridgeland & Milano, 2012). This section focuses on programs that specifically target employment. The populations served by these programs tend to fall at the least disconnected end of the disconnection spectrum, as many of them require participants to have a secondary credential to enroll (Treskon, 2016). These programs include Year Up and Young Adult Internship Program.

**Year Up.** Year Up, which operates in 14 cities, is an intensive, yearlong program that provides low-income young adults ages 18 to 24 with 6 months of training in information technology and finance, followed by a 6-month internship. This initiative is funded by the U.S.
DOL. Participation requires a high school diploma or equivalency. Participants receive support services, including access to social workers and a mentor outside of the program to provide personal and professional guidance. Participants also receive stipends tied to attendance and adherence to a performance contract (Roder & Elliott, 2014).

Roder and Elliot (2014) conducted an impact evaluation to examine the effect of three Year Up programs operating in Boston, New York City, and Providence. The evaluation objective was to use a randomized control trial to examine the effect of program participation on employment, earnings, and education outcomes. The researchers compared outcomes of the treatment and control groups using data collected through telephone interviews with participants four years after random assignment. Participants in the three programs examined were primarily African American (54%) or Latino (34%). The evaluation findings showed that Year Up participants had higher earnings and were more likely to be working full-time a year after program participation than control group participants. In addition, four years after study enrollment, Year Up participants continued to earn substantially more than control group. However, Year Up participants were less likely than control group participants to be attending college. This finding suggests that Year Up students’ success in the labor market reduced the likelihood that they would attend college during the four years after program enrollment (Roder & Elliot, 2014).

**Young Adult Internship Program.** Young Adult Internship Program (YAIP) serves young adults ages 18-24, or 16-24 with at least a 6th grade reading level, in New York who are disconnected from school and work. Many of whom have high school diplomas or equivalency credentials. The 9-month program uses a cohort structure and begins with an assessment of employability skills and social support needs. Work-readiness training and supportive counseling
are provided for the duration of the program. Participants engage in a 10-to 14-week paid internship, after which they receive placement support from the program to connect with education, advanced training, or employment (DYCD, 2009; Treskon, 2016). Results from the program revealed that in 2008 a total of 453 youth were enrolled and out of the 453, 441 youth completed orientation with 435 (96%) youth being placed in an internship (DYCD, 2009).

Education-Focused Programs

Many disconnected youth lack secondary education credentials, which greatly impedes their ability to connect to work or postsecondary education. For many, reconnecting with education involves a high school equivalency test, not a high school diploma. A high school equivalency may be more attainable either because youth have aged out of the public school system or because they believe that they can finish equivalency credentials faster than they could a high school diploma (Treskon, 2016).

High school equivalency credentials. Although research suggests that a high school diploma is preferable in the labor market, a high school equivalency serves as a critical second chance for many high school dropouts (Bloom, 2010). There are many young people who enroll in equivalency diploma programs or other high school equivalency preparation courses that are offered at schools, libraries, community-based organizations, and community colleges, many of which are supported by a combination of federal and state funding. One such program is the Adult Secondary Education program, which focuses on adult learners seeking to prepare for high school equivalency exams. The program engages individuals ages 16 and up (Bridgeland et al., 2016; GAO, 2008).

Young Adult Literacy program. The Young Adult Literacy (YAL) program seeks to improve the literacy, math, and job-readiness skills of disconnected young people between the
ages of 16-24 with reading levels between 4th and 8th grade. The program offers approximately 15 hours of literacy and math instruction each week. A 2009 study found that YAL providers that included an internship component had higher average math scores and program retention rates than participants at YAL providers with no internship component (Westat & Metis, 2011). Until 2013, all YAL programs placed participants in part-time internships at local businesses, organizations, or community projects. Starting in April 2013, all YAL providers modified the internship component due to lack of resources, offering instead project-based and service learning opportunities, or job shadowing. Providers serve cohorts of approximately 20 participants and engage them as long as necessary to reach an 8th reading level, enter a high school equivalency program, or both (Hossain and Terwelp, 2015).

**Postsecondary pathways.** Postsecondary education has a high value in today’s labor market, where nearly 60 percent of all job openings require some postsecondary training (Carnevale, Smith, & Strohl, 2013). Most disconnected young people lack experience with college (Bridgeland & Milano, 2012) and researchers have shown using longitudinal data that by age 28, only 1% of them have obtained associate’s or bachelor’s degrees compared with 36% of other young people (Belfield et al., 2012). Disconnected youth can face a long road to obtaining a postsecondary credential; however, new innovations in adult education are seeking to remove some of these obstacles and improve the transition to postsecondary education. These programs do not specifically target disconnected young people, but serve a range of adult learners (Treskon, 2016).

One program that targets youth who are seeking high school equivalency credentials is the equivalency-to-college bridge program. It has shown promise in both increasing equivalency exam pass rates and persistence into postsecondary education. Bridge programs take place on
college campuses and include college preparatory components. However, students in high school equivalency bridge programs do not qualify for Pell grants because these programs do not lead directly to postsecondary credentials. Bridge programs usually offer students additional forms of support, such as career and college counseling (Treskon, 2016).

Concurrent-enrollment programs take bridge programs a step further, allowing students to enroll in college classes while they take classes to obtain their high school equivalency credentials. Students in concurrent enrollment programs that use a career pathways approach qualify for Pell grants because the programs do lead to postsecondary credentials. These models allow participants to earn postsecondary credentials more quickly by permitting them to engage in postsecondary education while they work toward secondary credentials. Though many concurrent-enrollment programs exist, there is little evidence of their effectiveness (Treskon, 2016). It is unknown, for example, how many students who enroll in these programs go on to complete post-secondary degrees.

Gateway to College is a national program that specifically targets disconnected youth. Students without high school credentials have the opportunity to earn high school diplomas and college credits simultaneously. Students attend classes on a college campus and also receive comprehensive support services (Treskon, 2016). Gateway to College has 43 program sites across 23 states that partners with more than 125 school districts. An implementation study of three program sites was conducted and findings revealed that the biggest challenges that the program faced at the three program sites were retaining students during the initial term and ensuring their transition to the mainstream community college. At two of the program sites, the proportion of students who left the program after one semester was 44% at the Washington program site and 46% at the California program site. By the second semester, enrollment rates
across the three programs ranged from 47% to 79%. According to a student follow-up survey, most students who left the program without receiving a diploma did so because of personal circumstances such as health problems, family issues, or conflicts with work schedules (Willard, Bayes, & Martinez, 2015).

**Comprehensive Youth Programs**

Literature highlights the necessity of integrating supportive responses that do not treat education and employment as mutually exclusive program goals (Bridgeland & Milano, 2012). As such, comprehensive programs often offer a holistic perspective while assisting youth in obtaining their high school diploma or equivalency; progressing toward a postsecondary credential; and gaining work experience and career skills. In addition, youth have the opportunity to receive personal counseling, mentoring, and follow up supports (Bridgeland et al., 2016; Bridgeland & Mason-Elder, 2012). These comprehensive programs include: Job Corps, National Guard Youth ChalleNGe, YouthBuild, Project Rise, and the Re-Integration of Ex-Offenders (RExO) program. These programs specifically target disconnected youth.

**Job Corps.** Jobs Corps is the largest federal program for disconnected young people, serving more than 60,000 each year across 125 centers (Schochet, Burghardt, & McConnell, 2008; Treskon, 2016). This initiative is funded by the U.S. DOL. Job Corps is a full-time residential, education, and vocational training program that helps low-income, at-risk youth who are 16-24 years old earn a high school diploma or equivalency, learn a career, and connect to job opportunities (Bridgeland et al., 2016; Bridgeland & Mason-Elder, 2012; GAO, 2008). Services are delivered in three stages: outreach and admissions, center operations, and job placement services. Academic and personal services are central elements of Job Corps. Participants receive academic education, intensive vocational training, and other services including counseling, social
skills training, and health education. Academic education aims to remediate deficits in reading, math, and writing skills and provides an opportunity for participants to obtain a high school equivalency (Schochet et al. 2008).

Schochet et al. (2008) provided impact findings from the National Job Corps Study, a four-year longitudinal study on the effect of Job Corps participation on education and training, employment and earnings, and crime. The study compared outcomes of the treatment and control groups using survey data and administrative earnings records. Participants in nearly all locations were randomly assigned to either program or control group. Forty-eight percent of the sample was African American, non-Hispanic and 59% male. The results revealed that in comparison to the control group, program participation significantly increased student attainment of GED and vocational certificates. Average weekly earnings were not statistically significant until year 4, with treatment group participants earning approximately 12 percent more than control group members. Lastly, program participation significantly reduced participants’ involvement with crime, lowering rates of arrests, convictions, and incarcerations (Schochet et al. 2008).

**National Guard Youth ChalleNGe.** The National Guard Youth ChalleNGe program is funded by the U.S. Department of Defense and managed by the National Guard Bureau. Youth ChalleNGe is designed to provide opportunities to adolescents who have left school before earning a high school diploma (Bridgeland et al., 2016; Bridgeland & Mason-Elder, 2012). This initiative stemmed from a need to address underlying causes in addition to symptomatic behaviors and to equip youth for the post-program environment. ChalleNGe currently operates in more than half the states (34 programs in 29 states and Puerto Rico) reaching more than 100,000 young people since its inception in the early 1990s (Millenky, Bloom, Muller-Ravett, & Broadus, 2011). The first 5 months are residential, followed by 12 months of follow-up services.
This 17-month program enrolls youth between the ages of 16-18 who are unemployed or underemployed to improve their education and employment success (Bridgeland et al., 2016; Bridgeland & Mason-Elder, 2012).

Millenky et al. (2011) reported empirical findings from an impact evaluation using a random assignment research design. The evaluation objective was to examine the effect of program participation on educational attainment (e.g., GED) and employment rates. The researchers compared outcomes of the treatment and control groups using survey data collected about three years after participant enrollment. Most respondents were 20 years old. The evaluation findings showed that the program group was much more likely than control group to earn a GED and twice as likely to report earning at least one college credit. Program participants were more likely to be employed at the time of the survey administration and reportedly earned about 20 percent more than their control group counterparts in the year preceding the survey. It is noted that the earnings difference is driven, in part, by the fact that the treatment group worked more steadily during the period. In addition, there was no statistically significant difference between groups who were enlisted in the military. Overall, program group members reported spending substantially fewer months during the follow-up period being idle, that is not working, not in school, or not in the military (Millenky et al., 2011).

**YouthBuild.** YouthBuild is a full-time, comprehensive, non-residential DOL program implemented in local urban and rural communities by nonprofit and public entities. It is a community-based alternative education program that provides hands-on job training, educational, and community service opportunities for low-income youth ages 16-24 who have left high school without a diploma. In addition to spending 50 percent of their time in individualized academic instruction, participants learn job skills through building affordable
Miller, Millenky, Schwartz, Goble, and Stein (2016) provided interim impact findings from the YouthBuild evaluation. The program was evaluated using a random assignment design in which eligible youth were assigned either to a program group or to a control group. A total of 75 programs were randomly selected to participate in the study and these programs enrolled a total of 3,929 young people between August 2011 and January 2013. The interim analysis was based on data collected at 12 and 30 months following participant enrollment into program. The majority of sample participants were male (64%) and African American (63%) and Latino (15%). On average, study participants were nearly 20 years old when they entered and over 90 percent did not have high school diplomas or equivalency (Miller et al., 2016).

The interim analysis found that 31% of the program group obtained a GED in comparison to 18% of control group members. Twenty-two percent of the program group reported enrolling in a two-year community college compared with 17% of the control group. In addition, YouthBuild increased participation in vocational training and led to a small increase in the receipt of training certificates. At 30 months, 31% of the program members reported having enrolled in vocational training compared with 20% of control group. The program had no effect on employment; however, program group participants reported higher wages. Lastly, the program had no effect on arrest or conviction rates (Miller et al., 2016).

**Project Rise.** Project Rise is a federal initiative that combines education, work-readiness training, and paid internships. The 12-month program targets 16 to 24 year olds who lack a high school diploma or equivalency and have been out of school, out of work, and not in any type of education or training program for at least 6 months. Activities centered on case management
services, classroom education focused mostly on preparation for secondary credentials, and a paid part-time internship that was contingent on adequate attendance in the educational component. After the completion of internships, participants are expected to enter employment, postsecondary education, or both. The program was operated by three organizations in New York, New Jersey, and Missouri (Manno et al., 2015).

An implementation study of the program found that it was difficult for providers to engage participants continuously in the planned sequence of activities. Forty percent of the participants exited the program before the end of the 12-month program period. Despite this, within the 12-month program period about one-fourth of participants reported beginning employment within that year and 7.5% entered postsecondary education which included college courses or job-skills training (Manno et al., 2015).

Re-Integration of Ex-Offenders (RExO). Federal funding also supports efforts to re-integrate youth offenders as they are released from correctional facilities. These court-involved youth are more likely to experience periods of disconnectedness and are more likely to succeed if they have access to services that help them thrive when entering back into their communities. The DOL’s RExO program provides funding to develop guidance to the public workforce system on how to best serve formerly incarcerated youth, young adults, and adults. Youth RExO projects focus on pre- and post-release services, including case management, educational skills training, mentoring, high school diploma equivalency preparation and credit retrieval, work readiness training, job placement, and other supportive services (Bridgeland et al., 2016).

An impact evaluation using a random assignment design compared the effects of program participation on ex-offenders’ employment, earnings, recidivism, and other outcomes (e.g., mental health, substance abuse, housing, and child support). After a 2-year period, program
members reported having received, on average, a wider array of services than control group members. RExO significantly increased self-reported employment within both the first and second years of participant enrollment. In addition, the program had no effect on reported hourly wages, but did increase total reported income from all sources. Lastly, program participation had no effect on recidivism, self-reported mental health, substance abuse, housing, and child support (Wiegand, Sussell, Valentine, & Henderson, 2015).

**Case Management and Therapeutic Interventions**

Many of the above mentioned programs generally serve young people who are actively seeking opportunities to reconnect to school or work. However, a proportion of the population of disconnected youth have been categorized as chronically disconnected, referring to no school or work after age 16 (Belfield et al., 2012). There are very few programs targeting these young people and even less evidence of what works for engaging them. One approach to reaching this population is a case management approach. Rather than providing employment training or academic services, this approach focuses on providing youth with case managers who work with them intensively to address barriers they face to achieving their goals. A second approach involves the use of mental health and therapeutic interventions such as cognitive behavioral therapy, motivational interviewing, or multisystemic therapy. Rarely are these interventions used as a sole service that a young person will receive, but are often combined with other forms of support (Treskon, 2016).

**Current Efforts**

Recent initiatives indicate that collaborative approaches to meeting the needs of disconnected young people are likely to be of particular value (Treskon, 2016). The following collaborative efforts include Project U-Turn and Performance Partnership Pilots. The city of
Philadelphia created Project U-Turn, a city-wide effort to reconnect youth to secondary and higher education and provide career pathways. The project was established in 2006 and offers multiple program options to graduation such as: accelerated high schools for youth ages 15-21 who are two years or more behind their grade level; dual enrollment programs for youth between the ages of 15-21 that allow students to simultaneously earn a high school diploma and college credits; and night school that allows youth over the age of 17 to take courses in the afternoon to continue earning credits toward a high school diploma (Project U-Turn, 2018).

Performance Partnership Pilots are a recent effort to increase collaboration across institutions that provide services to disconnected youth (Treskon, 2016). This federal initiative was implemented following the U.S. Consolidated Appropriations Act of 2014 to address barriers in federally funded programs such as poor coordination across systems, burdensome administrative requirements, and fragmented data systems. This law provided authority for governmental agencies to carry out 3-year partnership pilot programs throughout the U.S. to serve disconnected youth (Fernandes-Alcantara, 2015a; Riley, 2014).

The Performance Partnership Pilots for Disconnected Youth directed federal agencies to work with state, local, and tribal governments to identify and develop strategies for eliminating programmatic requirements and increase financial flexibility to improve outcomes for disconnected youth. These agencies used discretionary funding to carry out pilots that involved federal education, training, employment, or related social services programs targeted to disconnected youth, or designed to prevent youth from becoming disconnected (Fernandes-Alcantara, 2015a; GAO, 2017; Riley, 2014).
Synthesis of Effective Interventions

The majority of programs presented focus on youth who voluntarily come forward to participate, but it has been noted in the literature that disconnected youth do not seek out programs or services. In addition, advocates indicate that the existing infrastructure of youth programs serves only a small fraction of the youth who need assistance. Thus, a critical goal should be to identify and disseminate effective strategies to engage profoundly disconnected young people who are unlikely to volunteer for programs (Bloom, 2010). Despite this, there are a number of effective interventions proven to be successful in the work with disconnected youth. This includes the following: opportunities for paid work experience, the use of financial incentives to boost engagement, strong links among education, training, and the job market; and the use of comprehensive support services such as case management services, counseling, and mentorship. In addition, there is strong evidence for follow-up services after employment or education placements or program participation (Treskon, 2016).

Implications of Reviewed Literature

Youth disconnection remains a growing societal concern due to the deleterious effects on each young person who remains detached from workforce participation and educational activities in the early adulthood years. A major challenge to studying this phenomenon has been a lack of a unified definition due to varying methodological approaches (Fernandes-Alcantara, 2015a; MaCurdy et al., 2006). Many of the studies performed since the 1990s have relied on different iterations of the definition by adjusting for the period of time examined, age of youth, and incorporating other characteristics or defining features (e.g., Belfield et al., 2012; Besharov & Gardiner, 1999; Fernandes-Alcantara, 2015a; MaCurdy et al., 2006). The current study relies on the most commonly used definition of youth disconnection which includes teenagers and young
adults between the ages of 16 and 24, who are neither in school nor working (Belfield et al., 2012; Burd-Sharps & Lewis, 2017; Fernandes-Alcantara, 2015a; Treskon, 2016).

The body of research regarding youth disconnection is scarce, and what does exist is primarily descriptive studies focusing on individual and family demographic and background characteristics (Besharov & Gardiner, 1999; Brown & Emig, 1999; Fernandes-Alcantara, 2015a; Hair et al., 2005; Hair et al., 2009; Jekielek & Brown, 2005; MaCurdy et al., 2006; Wald & Martinez, 2003). This methodological approach neglects the influence of social contexts within which individual development occurs (Rendón, 2014). Presently, there is a need to study the interactions between developmental processes and the social contexts in which they take place (Bynner & Parsons, 2002), particularly for the emerging adult population.

This current study fills this gap in the literature by using a mixed methods approach to examine features of context that explain how youth become disconnected from education and employment. To date, one empirical study exists that examined school and neighborhood contextual factors in relation to the likelihood of being disconnected in the young adult years (Rendón, 2014). This study investigated the influence of demographic and socio-cultural aspects of schooling and neighborhood effects simultaneously. This current study extends this line of research by focusing on malleable contextual factors within four major domains simultaneously: individual, family, peer group, and school. This research has importance for understanding the relational and social contexts of transition-aged youth and its influence on education and economic outcomes.
CHAPTER 4. METHODOLOGY

This chapter details the multiphase mixed methods approach used for this study. First, an overview of mixed methods research and its utility is discussed followed by a brief description of the characteristics of the multiphase mixed methods research design. Research questions and methods used are presented. The chapter outlines the methodology for each phase of the present study: phase one qualitative and phase two quantitative. The present study attempts to fill the gap in the literature by implementing qualitative and quantitative data analyses for a multiphase mixed methods design, providing an empirical study of contextual effects relevant to the odds of becoming a disconnected young adult.

Mixed methods research has been broadly described as an approach to knowledge that attempts to consider multiple viewpoints by integrating qualitative and quantitative research approaches. Moreover, this integration yields more breadth and depth of understanding and corroboration of research findings (Johnson, Onwuegbuzie, & Turner, 2007). Mixed methods research can be traced back to the 1950s, but emerged as a formalized field in the late 1980s from scholars’ collective efforts to understand the process of mixing quantitative and qualitative methods to better understand research problems. The mixed methods approach is now extensively applied in the social, behavioral, and health sciences research (Plano Clark & Ivankova, 2016). The utility, strength, and acceptance of mixed methods was emphasized by its recognition as the third research paradigm (Johnson et al., 2007), the third methodological movement (Teddlee & Tashakkori, 2012), and the third research approach, alongside qualitative and quantitative research (Creswell, 2014).

The utility of mixed methods research is seen at the general, practical, and procedural levels. At the general level, it draws on qualitative and quantitative research while lessening the
limitations of either. At the practical level, it appeals to researchers as a novel procedure. At the procedural level, mixed methods strategies provide a foundation for comparing quantitative and qualitative data, explaining quantitative results with qualitative data, exploring qualitative data to inform quantitative data collection, understanding experimental results by including the perspectives of participants, and developing a more comprehensive view of changes needed for marginalized groups (Creswell, 2014; Plano Clark & Ivankova, 2016).

### Research Design

An exploratory sequential mixed methods approach was used for this study as the combination of qualitative and quantitative approaches is likely to prove advantageous in capturing the complexities of youth disconnection. This approach involves collecting and analyzing qualitative data, following which, quantitative data is used to generalize, test, or confirm initial qualitative results. The mixing of the methods occurs chronologically: first, at the completion of the qualitative phase before moving into the quantitative phase and secondly, when the results from both phases are interpreted together. This approach is beneficial in that it allows the researcher to explore the phenomenon in depth with a few individuals and then allows for expansion of the findings to a larger population. A notable challenge with this multiphase approach is that it may require lengthy time and more resources to analyze both sets of data (Plano Clark & Ivankova, 2016).

In this study, the multiphase mixed methods exploratory design (see Figure 4.1) began with qualitative data analysis to gain insights into how contextual features in educational and familial settings shape pathways to disconnection. From the in-depth analysis of qualitative data, emerging themes were used to inform variable selection from the quantitative database.
Quantitative analysis of selected variables examined the extent of youth disconnection and its determinants in a nationally representative sample of African American youth.

**Figure 4.1. Multistage exploratory design. Source: Adapted from Plano Clark, V., & Ivankova, N. (2016). *Mixed methods research: A guide to the field.* Thousand Oaks, CA: Sage.**
Research Questions and Methods Used

Five research questions were posed, and the corresponding analytical methods are shown (See Table 4.1). The first research question was answered using qualitative data involving semi-structured interviews. The four remaining research questions were answered using quantitative data that included the analysis of a dichotomous outcome variable. This analysis was used to identify significant student-level, school-level, and interaction effects.

Table 4.1. Research Questions and Methods Used

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Method Used</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1</strong>: How do high-risk, African American youth describe the educational, familial, and social processes and experiences that promote or impede academic and workforce pursuits?</td>
<td>Use semi-structured interviews conducted with a parallel sample of participants</td>
</tr>
<tr>
<td><strong>RQ2</strong>: What student-level factors (e.g., family structure, family SES, educational risk factors, educational expectations, school engagement, parental engagement, and peer affiliation) are associated with being disconnected in the young adult years?</td>
<td>Analysis of quantitative data with dichotomous dependent variable</td>
</tr>
<tr>
<td><strong>RQ3</strong>: What school-level factors (e.g., school size, school type, school climate, average school SES, and average sense of school belongingness) are associated with being disconnected in the young adult years?</td>
<td>Analysis of quantitative data with dichotomous dependent variable</td>
</tr>
<tr>
<td><strong>RQ4</strong>: What effects do student-level factors have on being disconnected in the young adult years when considering school contextual factors?</td>
<td>School-level regression coefficients identified</td>
</tr>
<tr>
<td><strong>RQ5</strong>: Does peer affiliation moderate the relationship between parental engagement and the odds of being disconnected in the young adult years?</td>
<td>Interaction regression coefficient identified</td>
</tr>
</tbody>
</table>

Mixed Methods Sampling Strategy

Sampling design plays a pivotal role in determining the types of generalizations that are justifiable. In particular, large and random samples tend to allow for statistical generalizations.
and small, purposive samples tend to facilitate analytical generalizations and case-to-case transfers. However, in mixed methods research making appropriate generalizations become even more complex due to the combination of quantitative and qualitative approaches (Collins, Onwuegbuzie, & Jiao, 2007). For this study, parallel sampling was employed. A parallel relationship denotes that the samples for the qualitative and quantitative components of the investigation are different, but drawn from the same underlying population (Collins et al., 2007).

**Phase One: Qualitative Data**

The qualitative component of this study involved qualitative data derived from previous research with high-risk, transition-aged youth by this researcher. In principle, secondary analysis may be used to investigate new or additional research questions or alternatively, to verify findings of previous research (Heaton, 2008). The purpose of this secondary qualitative data analysis was to investigate new research questions regarding this youth population.

These data were collected as part of a pilot project that provided a coordinated service delivery system to support positive educational, career, and social outcomes for high-risk youth enrolled in an alternative high school setting (Youth.Gov). The urban alternative high school, located in a southeastern state in the U.S., was selected as a pilot location for the Performance Partnership Pilot for Disconnected Youth, or P3. P3 was a federal initiative that functioned to increase collaboration across institutions that provided services to disconnected youth (i.e., youth at risk of dropping out of an educational institution; GAO, 2017; Riley, 2014; Treskon, 2016).

The alternative high school, grades 9th-12th, was designed to provide accelerated learning opportunities to students who have fallen two or more years behind in their grade levels in their home schools. The alternative school has been operating for over 30 years and during the 2017-2018 academic school year served approximately 100 high-risk students daily who had dropped
out, or transferred from their mainstream schools. Students attending this school ranged in age from 16 to 21 years. With regard to race and ethnicity, approximately 95% were African American. Enrollment by gender included 52% males and 48% females, with 93% of the student population eligible for free lunch (CCD).

**Participants**

The qualitative sample consisted of overage 11th and 12th grade students who struggled academically and attended an alternative high school. Participants included nine students (5 males and 4 females) who identified as African American, were between the ages of 18 and 20, and were from low socioeconomic backgrounds. Youth were identified as high risk for disconnection in early adulthood because of high rates of absenteeism, failing grades, lack of educational progress, disciplinary referrals, and history of suspensions or expulsions. Maximum variation was the sampling strategy employed to inform the project in the most comprehensive way. This approach consisted of determining in advance some criteria that differentiated the participants and then selecting participants that were quite different on the criteria (Creswell & Poth, 2018). For example, criterion domains included school attendance, grade point average, number of suspensions, and number of expulsions. This approach increased the likelihood that findings reflect different perspectives and that youth sampled represented a broad spectrum of social engagement (Creswell & Poth, 2018).

**Data Collection Procedures**

A total of nine individual interviews were conducted by this researcher. Seven of the interviews were conducted during the 2017-2018 academic school year and the remaining two interviews were conducted during the Fall 2018 semester. The individual interviews lasted approximately 35 minutes each and were conducted at the alternative high school site during
school hours when students were scheduled for an elective course. The semi-structured interviews consisted of approximately 12 open-ended questions with embedded follow-up questions and were audio recorded to enhance credibility in the data collection process. Table 4.2 displays the interview protocol including new questions that emerged during the interview process. The goal of the qualitative inquiry was to assess students’ experiences with the pilot project during the 2017-2018 academic school year. A signed consent form was obtained, and students were informed that their participation was voluntary and that they could opt out at any time. Confidentiality was maintained and all procedures were kept anonymous to protect the identities of students; pseudonyms were used in reporting results (Anastas, 1999). The study was approved by Louisiana State University’s Institutional Review Board.

Table 4.2. Semi-structured Interview Protocol

<table>
<thead>
<tr>
<th>Interview Questions and Prompts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How did you come to attending this school? How did you feel about the process?</td>
</tr>
<tr>
<td>2. How has this school been different than what you’ve experienced before?</td>
</tr>
<tr>
<td>3. Thinking about your educational experiences, describe a time you felt school being there for you? Not being there for you?</td>
</tr>
<tr>
<td>4. What postsecondary options do you feel you have? What are your future goals?</td>
</tr>
<tr>
<td>5. How do you view education? How do your parents view education?</td>
</tr>
<tr>
<td>6. How have your parent’s educational experiences influenced how you interact with the school system? School personnel? Describe your relationship with your teachers, peers, and school administrators?</td>
</tr>
<tr>
<td>7. Tell me about your program involvement (P3) and what does it offer. What led to your interest in P3? Do you see your involvement as a stepping stone to something else?</td>
</tr>
<tr>
<td>8. How do you find out about vocational opportunities (e.g., dual enrollment, internships, skill certifications, etc.)? What motivates you to participate? Do you share this information with anyone? Tell me about your experience. (table cont’d)</td>
</tr>
</tbody>
</table>
Interview Questions and Prompts

9. How does having access to vocational opportunities influence your future goals or how you think about your future?

10. Describe any barriers to achieving your future goals. Despite barriers, what motivates you to continue pursuing your goals? What motivates you to attend school and progress toward a diploma or why do you stay in school?

11. What is your current academic and/or employment status?

12. What do you think about the phrase “disconnected youth”? What comes to mind when you hear it? Do you have any personal feelings regarding this phrase?

While secondary analysis is a known and well-established methodology for re-using quantitative data in social science research, the development and utilization of it in qualitative research has been slower. The potential of re-using qualitative research data was first recognized in the 1960s, but it was not until the mid-1990s that the first article dedicated to secondary analysis of qualitative data was published. In spite of this, the re-use of qualitative data has been debated due to several key issues. For one, there is the looming issue of “problem of data fit.” That is, whether data collected for one (primary) purpose can be re-used for another (secondary) purpose. Another major issue is the “problem of not having been there” where analysts try to interpret data that were collected by other researchers (Heaton, 2008). In addressing the latter, an identified strength of this qualitative component was that this researcher re-used data that were previously self-collected for secondary research purposes. Beyond this, in qualitative research, the relatively flexible nature of data collection strategies can result in datasets with variable depth and breadth of coverage of topics (Creswell & Poth, 2018). Furthermore, during qualitative data collection probing was used to elicit additional information to better understand contextual and social processes when warranted (Padgett, 2017; Rubin & Rubin, 1995).


**Data Analysis**

Each of the nine interview transcripts were reanalyzed manually for thematic analysis (Braun & Clarke, 2006). Generally, the process of thematic analysis involves coding the data into themes and categories by identifying and analyzing repeating patterns of information (Braun & Clarke, 2006). This researcher engaged in the data by first rereading transcripts and noting ideas about meaningful patterns. The second step involved identifying preliminary codes using an open coding system. This open coding system consisted of coding the entire body of data to generate significant social insight (Saldaña, 2013). As a result, there were a total of 279 codes that were then sorted by contextual domains: individual (152 codes), family (38 codes), peer group (11 codes), and school (78 codes). Within each domain, codes were sorted by similarities to generate categories and subcategories, thus beginning interpretive analysis of the collated codes. The next step included generating themes and subthemes within the data. The last step involved ongoing analysis to refine the specifics of each theme using thematic mapping of the data (Braun & Clarke, 2006; Creswell & Poth, 2018).

**Strategies for Enhancing Rigor**

Throughout the data analysis process, preliminary findings were continuously checked against the audio recordings for referential adequacy. In addition, themes were reflected at the semantic level of data with illustrative quotes from participants (Creswell & Poth, 2018). The thick and rich description found in the data lends to increased transferability of findings despite the small sample size (Merriam & Tisdell, 2016). The maximum variant purposeful sampling strategy ensured that all subgroups within the research setting were given a voice so that comparisons could be used to construct commonalities and differences in interpretation across groups (Creswell & Poth, 2018). Also, triangulation through multiple data sources (i.e., multiple
interviewees), adequate engagement with the data, and data saturation aided in establishing credibility (Creswell & Poth, 2018; Lincoln & Guba, 1985; Merriam & Tisdell, 2016; Padgett, 2017).

**Philosophical Assumptions**

The interpretative framework for qualitative analysis relied on social constructivism. In this paradigm, human development is socially situated and knowledge is constructed through the interactions with others and through historical and cultural norms that operate in individuals’ lives. Reliance on participants’ subjective views of their situations and the meanings they ascribe to their experiences was of primary importance in this approach (Creswell & Poth, 2018).

**Phase Two: Quantitative Data**

The quantitative data used for analyses were from the HSLS:09 database sponsored by the U.S. Department of Education’s National Center for Education Statistics (NCES). These restricted data tracked the educational and developmental experiences of a nationally representative sample of high school ninth-graders in the U.S. The data collection waves included a base-year in 2009, fall term of 9th grade; first follow-up in 2012, spring term of 11th grade; and a second follow-up in 2016 when participants were 3 years out of high school (Duprey et al., 2018; Ingels, Pratt, Herget, Dever, Fritch, Ottem, & Rogers, 2013). Base-year (2009) and second follow-up (2016) data were used for this study.

The HSLS:09 is a stratified, two-stage random sample design with primary sampling units defined as schools selected in the first stage and students randomly selected from the sampled schools within the second stage. A total of 940 of 1,890 eligible public schools, including charter schools, and private schools in the 50 states and the District of Columbia participated in base-year sampling; a 55.5% weighted response rate (Ingels et al., 2011).
Sampling strata were created by the interaction of school type, geographic region, and locale (i.e., metropolitan area) of the school for schools that had both 9th and 11th grades as of fall 2009. In the second stage, approximately 26,300 students were randomly selected from the 940 participating schools for an average of 28 and 26 students sampled per public school and private school, respectively. The sampling strata were defined by student’s race and ethnicity specified by the school. Of the 26,300 sampled students, 25,200 were classified as eligible to participate and a total of 21,440 responded; an 85.7% weighted response rate (Duprey et al., 2018; Ingels et al., 2011; Ingels et al., 2013; Radford, Fritch, Leu, & Duprey, 2018).

The first follow-up target populations are the same as defined for the base year. No new sample of schools was selected for this round and the student sample was not freshened to include a representative 11th grade cohort. Therefore, the base-year school sample in the first follow-up is not representative of high schools with 9th and 11th grades in the 2011-2012 school year. The student sample is associated with only the 9th grade cohort 2.5 years later. Of the eligible 25,210 base-year sample members, 25,180 remained eligible at the first follow-up and a total of 20,590 responded; an 82% weighted response rate (Ingels et al., 2013). By the second follow-up, only 25,120 sample members were eligible. Of the 25,120 eligible students, 17,340 responded; a 67.9% weighted response rate (Radford, Fritch, Leu, & Duprey, 2018).

**Sample**

The quantitative data used for analyses were from the HSLS:09 database which involved a stratified, two-stage random sample design (Ingels et al., 2011). Analyses for this study focused on a specific subgroup of the full population sample. Sample selection involved a conditional approach in which the dataset was restricted to African American students in public schools.
before performing analyses. The sample included 2,230 African American students enrolled in 510 public high schools.

This sample was further reduced to address the presence of a rare event of the outcome variable (i.e., being a disconnected young adult) in the analytic sample. The outcome variable was measured using postsecondary enrollment and labor force status (X4PSLFSTFB16) of African American respondents 3 years out of high school and was coded 1 for disconnected and 0 for not disconnected. Figure 4.2 displays the distribution of means for the outcome variable for the 510 public schools that contained African American students. The mean of a binary variable is the relative frequency of events in the data, which, in addition to the number of observations, constitutes the information content of the data set (King & Zeng, 2001). The distribution showed that of the 510 public schools, 62% of the schools had students that were not disconnected in young adulthood (school mean of 0) and 9% of the schools had all students that were disconnected in young adulthood (school mean of 1), indicating that the occurrence of the event was far less frequent within the analytic sample. As a result, schools with a mean of 0 and 1 were dropped from the analyses to account for the modeling of a rare event. This step was necessary to prevent inflated intraclass correlation coefficients and inaccurate parameter estimates produced in regression models (King & Zeng, 2001). Thus, the quantitative analyses modeled the variation of the outcome variable.

The final sample included 1,210 African American students enrolled in 150 public high schools. Of this sample, 51% were male and 49% were female. The students’ age range during base year was 14-18 years old. The HSLS:09 dataset allows for robust statistical power, given the sample size (Hinkle, Wiersma, & Jurs, 2003). Insufficient sample size reduces statistical power; moreover, insufficient sample size at level 2 increases Type I error rates pertaining to
level-2 fixed effects (Sommet & Morselli, 2017). In multilevel modeling, the argument has advanced that the number of clusters are more important than the number of observations per cluster to get high power and accuracy (Hox, 2010; Swaminathan, Rogers, & Sen, 2011). Studies show that 50 or more level-2 units are necessary to accurately estimate standard errors (Maas & Hox, 2005).


Instrumentation

All variables included in the analysis were from the HSLS:09 database and instruments consisted of student, parent, and school administrator questionnaires. The student questionnaire
was primarily self-administered using a computer during in-school sessions. If a student was unable to participate during the in-school sessions, a telephone interview was conducted using the same survey instrument with only the addition of interviewer instructions. (Ingels et al., 2011). The student questionnaire collected information on sample members’ demographic characteristics, school experiences, and postsecondary and career plans (Duprey et al., 2018).

Parent questionnaires were completed by the parent or guardian most familiar with the student’s school situation and experience. This individual was self-selected. Parents had the option of self-administering the questionnaire via the internet or completing a telephone interview. The parent questionnaire collected information about family demographics and household characteristics, student’s educational history, and parents’ involvement in students’ education and learning. The school administrator questionnaire was completed by the principal or another knowledgeable individual on the school’s staff. The school administrator questionnaire collected information on the school’s characteristics, information on the faculty and student body, and questions about the school’s administrator’s background and his or her evaluation of the school’s problems (Ingels et al., 2011). The individual items contained in all instruments are identified and explained below.

**Variables**

The variables for testing emerged from in-depth analysis of qualitative data and existing literature regarding the disconnected youth population. This researcher reanalyzed qualitative data that were previously collected from semi-structured interviews that lasted approximately 35 minutes each. From these qualitative data, emerging themes were used to determine and to select variables from the HSLS:09 national longitudinal database survey. Table 4.3 specifies the variables used from the dataset.
Table 4.3. Variables Used from HSLS09

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1SEX</td>
<td>Student’s gender</td>
</tr>
<tr>
<td>X1SES</td>
<td>Scale of socioeconomic status</td>
</tr>
<tr>
<td>X1PARPATTERN</td>
<td>Family structure</td>
</tr>
<tr>
<td>P1REPEATGRD</td>
<td>9th grader has repeated a grade</td>
</tr>
<tr>
<td>P1SUSPEND</td>
<td>9th grader has ever been suspended or expelled</td>
</tr>
<tr>
<td>X1STUEDEXPCT</td>
<td>How far in school 9th grader thinks he/she will get</td>
</tr>
<tr>
<td>X1SCHOOLENG</td>
<td>Scale of student’s school engagement</td>
</tr>
<tr>
<td>MTOTPARENTENG</td>
<td>Parental engagement composite</td>
</tr>
<tr>
<td>MTOTPEERS</td>
<td>Peer affiliation composite</td>
</tr>
<tr>
<td>A1CAPACITY</td>
<td>Percent capacity to which school is filled</td>
</tr>
<tr>
<td>A1SCHTYPE</td>
<td>School type</td>
</tr>
<tr>
<td>X1SCHOOLCLI</td>
<td>Scale of administrator’s assessment of school climate</td>
</tr>
<tr>
<td>MSES</td>
<td>Average school socioeconomic status</td>
</tr>
<tr>
<td>MSCHBEL</td>
<td>Average sense of school belongingness</td>
</tr>
<tr>
<td>X4PSLFSTFB16</td>
<td>Postsecondary enrollment and labor force status</td>
</tr>
</tbody>
</table>


Variables were used at two levels. Variables used at the student level (L1) included: gender (X1SEX), family socioeconomic status (X1SES), family structure (X1PARPATTERN), educational risk factors (P1REPEATGRD and P1SUSPEND), student educational expectations (X1STUEDEXPCT), school engagement (X1SCHOOLENG), parental engagement composite (MTOTPARENTENG), and peer affiliation composite (MTOTPEERS). Variables used at the school level (L2) included: school size (A1CAPACITY), school type (A1SCHTYPE), school climate (X1SCHOOLCLI), average school socioeconomic status (MSES), and average sense of school belongingness (MSCHBEL). The outcome variable (X4PSLFSTFB16) examined was dichotomous and had the measurement of being either yes or no. A diagram of the multilevel structure of the study variables are presented in Figure 4.3. Descriptions of the variables, their meaning, and how they were coded for this study follows.
Student-level variables. A set of student-level explanatory variables included demographic variables (e.g., gender, family socioeconomic status [SES], and family structure). In the literature, these variables are known to be strongly associated with education and workforce-related outcomes (Hair et al., 2005; Hair et al., 2009; Rendón, 2014). $X_{1SEX}$ was a dichotomous variable representing the gender of the sample member coded 1 for male and 2 for female. Family SES ($X_{1SES}$) represented a measure of the family’s relative position within the social structure of the U.S. SES was taken from a composite comprising five equally weighted variables of parent/guardians’ education, parent/guardians’ occupation, and family income at base-year (Ingles et al., 2011). This continuous variable was standardized and transformed into z-scores. Scores ranged from $-1.93$ to $2.88$, with a mean of $0.04$ and standard deviation of $0.78$. Family structure ($X_{1PARPATTERN}$) was a categorical variable that measured whether there were no parent, one parent, or two parents in a sample member’s home and the relationship of
those parent(s) to sample member. This variable defined parent to include biological, adoptive, or guardian and was recoded 1 for two-parent household and 2 for single-parent household or no parent.

Additional student-level variables emerged from qualitative results. Educational risk factor measures used in the analysis included two items: whether 9th grader has repeated a grade (P1REPEATGRD) and whether 9th grader has ever been suspended or expelled (P1SUSPEND). Responses were 0 for no and 1 for yes. Student educational expectations (X1STUEDEXPCT) was a categorical variable indicating the highest level of education the sample member expects to achieve. This variable was recoded 1 for low educational expectations (e.g., high school/GED completion or below) and 2 for high educational expectations (e.g., complete associates degree and beyond). School engagement (X1SCHOOLENG) was a continuous variable that measured sample members’ behavioral engagement in school during their 9th grade year. Items included “how often 9th grader goes to class without homework done”, “how often 9th grader goes to class without books”, “how often 9th grader goes to class without paper or pencil”, and “how often 9th grader goes to class late.” Responses ranged from 1 (never) to 4 (often). The coefficient of reliability (α) was .65. For this continuous measure, values were standardized and transformed into z-scores. Scores ranged from -3.36-1.39 with a mean of 0.05 and standard deviation of 0.98. Higher values represented greater school engagement.

Parental engagement (MTOTPARENTENG) was a composite variable created by this researcher to measure parental support and school contact. Example items included whether 9th grader talked to parent or guardian about school coursework (e.g., math courses, science courses, and other courses), going to college, and adult jobs/careers; and whether parent or guardian attended a parent-teacher conference, a general school meeting, a parent teacher organization
meeting, a school event, met with a school counselor, served as a school volunteer, or participated in a school fund-raiser during sample members’ base year. Responses were from both female and male guardians and were coded 0 for no and 1 for yes. Values of -7 (item legitimate skip/NA), -8 (unit non-response), and -9 (missing) were re-coded as system missing for this study. Five datasets were generated using multiple imputation procedures to address missing data. A composite score was created for each imputed dataset and averaged across the imputed datasets. The average of the 17 items served as the final composite measure with a mean of 9.30, standard deviation of 3.90, and a range of -0.77-17.36. Higher values represented greater parental engagement.

Peer affiliation (MTOTPEERS) was a composite variable created by this researcher to measure sample members’ friends orientation to school and academic success (e.g. “whether closest friend is interested in school,” “whether closest friend gets good grades”, “whether closest friend plans to go to college,” and “whether closest friend attends class regularly”). Responses were coded 1 for true and 2 for false. Values of -8 (unit non-response), and -9 (missing) were re-coded as system missing for this study. Five datasets were generated using multiple imputation procedures to address missing data. A composite score was created for each imputed dataset and averaged across the imputed datasets. The average of the four items served as the final composite measure with a mean of 4.59, standard deviation of 0.90, and a range of 3.63-8.00. Lower values represented greater peer affiliation to school.

School-level variables. A set of school demographic variables included (e.g., school size and school type). School size (A1CAPACITY) was a continuous variable that expressed high school student enrollment as a percentage of capacity. For this continuous measure, scores ranged from 20-150 percent, with a mean of 93.33 and a standard deviation of 12.18. School type
(A1SCHTYPE) was a categorical variable that characterized type of public school (e.g., regular school not magnet/charter, charter school, special program or magnet school, vocational or technical school, and alternative school). This variable was recoded into a dummy variable, 1 for regular school not magnet/charter.

School climate (X1SCHOOLCLI) was a continuous variable that measured administrator’s assessment of his/her school’s climate (i.e., frequency of violent and nonviolent acts). Example items included frequency of conflict, robbery, vandalism, drug sale, weapon possession, physical abuse, bullying, disrespect, and gang involvement. Responses ranged from 1 (daily) to 5 (never happened). The coefficient of reliability ($\alpha$) was .65. For this continuous measure, scores were standardized and transformed into z-scores ranging from -4.22-1.97, with a mean of -0.38 and standard deviation of 1.05. Higher values represented more positive assessments of the school’s climate (i.e., fewer problems indicated).

Two additional school-level variables were constructed by aggregating individual-level data collected of all students to the school level, average school SES and average sense of school belongingness. Mean school SES (MSES) measured average school socioeconomic status which ranged from -1.01-1.51, with a mean of 0.05 and standard deviation of 0.44. Mean school belongingness (MSCHBEL) was a scale of student’s sense of school belonging during their 9th grade year (e.g., “9th grader feels safe at school”, “9th grader is proud to be part of his/her school”, “9th grader has teacher/adult in school he/she can talk to about problems”, and “9th grader feels that school is often a waste of time”). For this continuous measure, scores were standardized and transformed into z-scores ranging from -7.43-0.79, with a mean of -1.41 and standard deviation of 1.24. Higher values represented greater sense of school belonging. Using
the mean of a lower-level variable as an explanatory variable at a higher level is a common procedure in multilevel analysis (Hox, 2010; Snijders & Bosker, 2012).

**Outcome variable.** The outcome variable of interest was being a disconnected young adult. Disconnected young adults were defined as respondents not in school and not working. This outcome is an indicator of an unsuccessful transition into adulthood given it is associated with higher odds of poverty in later life (Fernandes-Alcantara, 2015a; Rendón, 2014). The outcome variable was measured using postsecondary enrollment and labor force status (X4PSLFSTFB16) of respondents during the second follow-up data collection period, 2016, when sample members were 3 years out of high school. This variable was coded as a dichotomous variable (1 = *for not enrolled in postsecondary education and unemployed/not in the labor force*, 0 = *for either postsecondary enrollment, working at least part-time, or both*).

**Data Management**

The public-use version of the HSLS:09 dataset, despite providing rich contextual factors, was insufficient for multilevel analysis of data pertinent to research needs. The public-use version of the data does not permit school-level data analysis and as such security clearance was requested from NCES to obtain the restricted data file. Once the clearance was approved, the data were sent on a CD. The CD was housed in a passcode, protected safe behind several layers of security. The safe was located behind two locked doors with an alarm. An office was prepared that met security clearance requirements in order to conduct the analyses. The secure office space included a standalone desktop computer that was not networked to a printer or the internet, which housed the restricted data in accordance with security procedures. All data manipulation and analyses were conducted on the secure computer and accessed with a password that only the
researcher and research advisor knew. When restricted data were in use, unauthorized individuals were not permitted to access the office.

Data Analysis

Educational data are often hierarchical or multilevel, such as when student-level data are nested within schools. The analysis of such data takes into account that each level of nesting is associated with variability that has a distinct interpretation. There is variability, for example, between students and also between schools; one may draw incorrect conclusions if no distinction is made between these different sources of variability (Snijders & Bosker, 2012; Tabachnick & Fidell, 2013). As such, this study utilized multilevel analysis to analyze the data from the HSLS:09 database. Conventional regression models are not appropriate for analysis of nested data because they fail to take into account the multiple sources of variance within the data and their consequences (Raudenbush & Bryk, 1986; 2002). For one, the sampling design of the HSLS:09 dataset violates the assumption of independence of observations. That is, students within the same schools share experiences that may affect their responses (Raudenbush & Bryk, 2002; Sommet & Morselli, 2017). In addition, conventional regression models do not allow estimation of the between-school variation. In contrast, multilevel analysis takes the nesting of students within schools into account, allows the use of student and school variables at different levels, and permits the computation of between-school variance. Further, multilevel analysis allows simultaneous estimation of both student-level and school-level variance components on the outcome variable of interest, while still maintaining the appropriate level of analysis for the sets of explanatory variables (Raudenbush & Bryk, 2002; Tabachnick & Fidell, 2013).

Data for this study were analyzed following a three-step process. The initial phase focused on accuracy and data quality of the HSLS:09 data file. This involved examination of
descriptive statistics and graphic representations of each variable. Phase two focused on missing data. The extent of missing data was assessed by running procedure frequencies in SAS and determining if missing values exceeded 10%. Subsequent to this examination, a decision was made to handle missing data. For example, where missing data did not occur randomly, a decision was made to either remove the variable depending on its significance to the study, recode the variable if continuous to a dichotomous variable in which missing values fall off, or multiple imputation (Tabachnick & Fidell, 2013). Missing data can be a problem in statistical analyses for two reasons. First, if the cases of missing values differ systematically from complete cases, then the results can be misleading. Second, inferential statistics are based on complete sets of data, and having missing values can reduce the overall precision of the analyses because less information is available (Little & Rubin, 1987).

The final phase involved multicollinearity diagnostics. Multicollinearity diagnostics were conducted to determine the intercorrelations among the predictor variables. If variables in the study were highly correlated to each other it would lead to unstable regression estimates and variance parameters. Multicollinearity investigation began with a correlation analysis to determine if any variables had a high correlation (e.g., 0.8 or higher). Next collinearity diagnostics involved investigation of the Variance Inflation Factor (VIF), tolerance, and the eigenvalue and condition number. If any of the following conditions were met, then there could potentially be a collinearity concern: 1) a VIF greater than 10, 2) tolerance value that falls below 0.1, or 3) an eigenvalue close to 0 and a large corresponding condition index (Schreiber-Gregory, 2017).

This study employed a multilevel logistic regression model to explore the between-school variability and the effects of student-level and school-level characteristics on the binary outcome
variable, being a disconnected young adult at the second follow-up in 2016. The general aim of multilevel logistic regression is to estimate the odds that an event will occur while taking the dependency of data into account. It allows estimation of such odds as a function of lower level variables (e.g., students' gender), higher level variables (e.g., school size), and the way they are interrelated (Sommet & Morselli, 2017). Students were the study units for level 1 nested in schools, which were the study units for level 2. The model building process was done to accommodate missing data as well as imputed data. Centering was not necessary in this analysis since zero reflected a meaningful category for the predictor variables for interpretation (Ene, Leighton, Blue, & Bell, 2015; Raudenbush & Bryk, 2002).

An unconditional mean model was used to determine the intraclass correlation coefficient (ICC) or overall between-school variance for the outcome measure. The ICC may range from 0 to 1. ICC = 0 indicates perfect independence of residuals; the observations do not depend on school membership. However, ICC = 1 indicates perfect interdependence of residuals; the observations only vary between clusters (Sommet & Morselli, 2017). This model partitioned the variance of the outcome variable into between-school and within-school components; and contained no predictor variables (Snijders & Bosker, 2012; Sommet & Morselli, 2017). After finding the extent to which the odds of being a disconnected young adult varied between schools, the next step involved building the intermediate models by adding level-1 predictors, level-2 predictors, and an interaction term. Estimated regression coefficients and standard errors were presented. For a more intuitive interpretation, odds ratios and 95% confidence intervals were reported when describing relationships between predictors and outcome (Ene et al., 2015). Odds ratio (OR) is a measure of association between exposure and an outcome, it represents the odds that an outcome will occur given a particular exposure. OR refers to the multiplicative factor by
which the predicted probability of an event occurring rather than not occurring (i.e., $P(Y=1)/1-P(Y=1)$) changes when the predictor variable increases by one unit. If $OR>1$, the higher the predictor variable, the higher the odds of the event occurring (a positive effect). Conversely, if $OR<1$, the higher the predictor variable, the lower the odds of the event occurring (a negative effect).

Throughout the model building process, fit statistics were used to assess model fit: 1) $-2$ log likelihood (-2LL) and 2) investigating the change in Akaike’s information criterion (AIC; Ene et al., 2015; Hox, 2010). With the -2LL, models were evaluated for best fit by conducting a deviance test. This is a chi-square difference test in which the difference in the -2LL values were compared between models (Ene et al., 2015). The calculations for conducting the deviance test between 2 models is provided below:

\[
X^2_{diff} = -2LL_{Model1} - -2LL_{Model2}
\]

The AIC is a general fit index used to compare the fit of statistical models by investigating the change in the AIC value, smaller values indicated a better fitting model (Hox, 2010).

**Model Specification**

The structure of the HSLS:09 data is nested by students within schools. As such, multilevel logistic regression (MLLR) was used for data analysis. A two-level MLLR was most appropriate given two levels of random variation among students within school and among schools (Raudenbush, & Bryk, 2002; Snijders & Bosker, 2012; Tabachnick & Fidell, 2013). The advantage of using MLLR included the ability of the model structure to account for the variance component at the school level. An initial two-level model, student level (L1) and school level (L2) was specified in which the response variable was modeled without prior predictors.
This model, the unconditional, was developed to compare to more complex models. This unconditional model was a random effects ANOVA model:

\[ Y_{ij} = \mu + U_j + R_{ij} \]

where \( Y_{ij} \) is the outcome value observed for micro-unit \( i \) within macro-unit \( j \), \( \mu \) is the population grand mean, each group \( j \) has a ‘true mean’ \( \mu + U_j \), and each measurement of a micro-unit within \( j \) deviates by some \( R_{ij} \) (Snijders & Bosker, 2012).

Note that \( U_j \) is a random variable. It is assumed independence on all variables, with group effects \( U_j \) that have a population mean 0 and variance \( \tau^2 \) (population between-group variance), and the residuals having mean 0 and variance \( \sigma^2 \) (population within-group variance interpreted as the average residual variance). The total variance of \( Y_{ij} \) was then equal to the sum of these two variances, \( \text{Var}(Y_{ij}) = \tau^2 + \sigma^2 \) (Snijders & Bosker, 2012).

The model provided the ICC which is “the degree of resemblance” between micro-units, students, within the same macro-units, schools expressed as \( \rho_1 = \tau^2 / (\tau^2 + \sigma^2) \), where \( \sigma^2 = \pi^2 / 3 = 3.29 \) (variance of logistic distribution for the level-one residual). A statistical test could be conducted to test \( H_0 \) that the true between group variance is no different from 0 (Snijders & Bosker, 2012; Sommet & Morselli, 2017).

For the dichotomous outcome, the response variable was a binary response, \( Y_{ij} \) for student \( i \) in school \( j \) and \( X_{ij} \) was an explanatory variable at the student level. The probability of \( Y_{ij} = 1 \) is defined as \( P_{ij} = \text{Pr}(Y_{ij} = 1) \) with the assumption of a Bernoulli distribution (Guo & Zhao, 2000; Hox, 2010; Raudenbush, & Bryk, 2002).

The two-level model is shown here for the dichotomous outcome:

\[ \log \left[ \frac{p_{ij}}{1 - p_{ij}} \right] = \beta_0j + \beta_{1j}X_{ij} \] (L1 model)
\[ \beta_0j = \gamma_{00} + \gamma_{01}W_j + u_{0j} \] (L2 model)
\[ \beta_{1j} = \gamma_{10} \]

The log \(\log[p_{ij}/(1 - p_{ij})]\) is the log-odds of being a disconnected young adult for student \(i\) in school \(j\). The intercept, \(\beta_{0j}\), is the average log-odds of being a disconnected young adult at school \(j\), and \(\beta_{1j}\) represents the slope associated with \(X_{ij}\), a student level predictor for student \(i\) in school \(j\) that shows the relationship between the predictor and the log-odds of being a disconnected young adult. The intercept, \(\gamma_{00}\), represents the log-odds of being a disconnected young adult at school \(j\), \(\gamma_{01}\) shows the slope associated with school level predictor, \(W_j\), \(u_{0j}\) is the level-2 error term representing a unique effect associated with school \(j\), and \(\gamma_{10}\) as the average effect of the student-level predictor across schools. The fixed effect, \(\gamma_{10}\), suggests the L2 model is a random intercept only model (Guo & Zhao, 2000; Raudenbush, & Bryk, 2002). The full combined model then becomes:

\[ \log[p_{ij}/(1 - p_{ij})] = \gamma_{00} + \gamma_{01} W_j + u_{0j} + \gamma_{10} X_{ij} = \eta_{ij} \]

or, rearranging \(\eta_{ij} = \gamma_{00} + \gamma_{10} X_{ij} + \gamma_{01} W_j + u_{0j}\)

The log-odds of being a disconnected young adult for student \(i\) in school \(j\) (\(\eta_{ij}\)) is now determined by the log-odds of being a disconnected young adult by a typical student at some school \(\gamma_{00}\), the effect of the student-level (\(\gamma_{10} X_{ij}\)) and school-level predictor (\(\gamma_{01} W_j\)) with school-level error \(u_{0j}\) \([u_{0j} \sim N(0, \tau_{00})]\).

The researcher built a parsimonious model, which began with the unconditional model which was the intercept only model (Ene et al., 2015). Once the ICC was calculated, estimating how much variance in the outcome exists between school level (L2) units, the researcher added the explanatory variables. To check for model fit improvement at each level, examination of the deviance change in the -2LL or change in the AIC was conducted (Ene et al., 2015; Raudenbush, & Bryk, 2002).
The models for the dichotomous outcome using the variables of interest are shown below.

The NULL MODEL

\[
\operatorname{Prob}(X_{4PSLFSTFB16ij}=1|\beta_j) = \varphi_{ij}
\]

\[
\log[\varphi_{ij}/(1 - \varphi_{ij})] = \eta_j
\]

\[
= \gamma_{00} + u_{0j}
\]

The L1 MODEL

\[
\eta_{ij} = \beta_{0j} + \beta_{1j}(X_{1\text{SEX}_{ij}}) + \beta_{2j}(X_{1\text{SES}_{ij}}) + \beta_{3j}(X_{1\text{PARPATTERN}_{ij}}) + \\
\beta_{4j}(P1\text{REPEATGRD}_{ij}) + \beta_{5j}(P1\text{SUSPEND}_{ij}) + \beta_{6j}(X_{1\text{STUDEXPCT}_{ij}}) + \\
\beta_{7j}(X_{1\text{SCHOOLENG}_{ij}}) + \beta_{8j}(\text{MTOTPARENTENG}_{ij}) + \beta_{9j}(\text{MTOTPEERS}_{ij})
\]

The L2 MODEL

\[
\beta_{0j} = \gamma_{00} + \gamma_{01}(A1\text{CAPACITY}_{j}) + \gamma_{02}(A1\text{SCHTYPE}_{j}) + \gamma_{03}(X1\text{SCHOOLCLI}_{ij}) + \\
\gamma_{04}(M\text{SES}_{j}) + \gamma_{05}(M\text{SCHBEL}_{j}) + u_{0j}
\]

The MIXED MODEL

\[
\eta_{ij} = \gamma_{00} + \gamma_{01} A1\text{CAPACITY}_{j} + \gamma_{02} A1\text{SCHTYPE}_{j} + \gamma_{03} X1\text{SCHOOLCLI}_{ij} + \\
\gamma_{04}(M\text{SES}_{j}) + \gamma_{05}(M\text{SCHBEL}_{j}) + \gamma_{10} X1\text{SEX}_{ij} + \gamma_{20} X1\text{SES}_{ij} + \gamma_{30} X1\text{PARPATTERN}_{ij} + \\
\gamma_{40}(P1\text{REPEATGRD}_{ij}) + \gamma_{50}(P1\text{SUSPEND}_{ij}) + \gamma_{60}(X1\text{STUDEXPCT}_{ij}) + \gamma_{70}(X1\text{SCHOOLENG}_{ij}) + \\
\gamma_{80}(\text{MTOTPARENTENG}_{ij}) + \gamma_{90}(\text{MTOTPEERS}_{ij}) + \gamma_{11} \text{MTOTPARENTENG}_{ij} \times \text{MTOTPEERS}_{ij} + u_{0j}
\]

Given the models, the model building process followed. First the random effect for the intercept, the unconditional model, was computed then additional models followed by addition of the level-1 then level-2 predictors (see Table 4.4).
Table 4.4. Model Building Process for 2-level Linear Model Being a Disconnected Young Adult

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No predictors; only intercept random effect</td>
<td>Model 1+ level 1 fixed effects</td>
<td>Model 2 + level 2 fixed effects</td>
</tr>
<tr>
<td>Output to calculate ICC-amount of variation in the dependent variable between level 2 units</td>
<td>Results indicate strength of the relationship between level 1 predictors and dependent variable</td>
<td>Level 2 fixed effect results indicate the relationship between level 2 predictors and dependent variable</td>
</tr>
</tbody>
</table>

CHAPTER 5. RESULTS

This chapter describes the results and analyses of the qualitative and quantitative data in a multiphase mixed methods design. The first set of results presented includes those that emerged from qualitative data to gain insights into how contextual features in educational and familial settings shape pathways to youth disconnection (i.e., no school or work). The identifying themes that emerged were used in the process of identifying variables from the national HSLS:09 database. Results from quantitative analysis were presented to determine predictors of youth disconnection in a nationally representative sample of African American youth.

Phase One: Qualitative Results

Participant Characteristics

The qualitative sample consisted of overage 11th and 12th grade students who struggled academically and attended an urban alternative high school located in a southeastern state in the U.S. during the 2017-2018 academic school year. Participants included nine students (5 males and 4 females) who identified as African American, were between the ages of 18 and 20, and were from low socioeconomic backgrounds (See Table 5.1). Youth were identified as high risk for disconnection from school and work in early adulthood because of high rates of absenteeism, failing grades, lack of educational progress, disciplinary referrals, and history of suspensions or expulsions. Names were chosen to preserve anonymity.

Table 5.1. Participant Characteristics

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>Age</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gilden</td>
<td>Male</td>
<td>African American</td>
<td>20</td>
<td>12th</td>
</tr>
<tr>
<td>Victoria</td>
<td>Female</td>
<td>African American</td>
<td>18</td>
<td>12th</td>
</tr>
<tr>
<td>Dena</td>
<td>Female</td>
<td>African American</td>
<td>19</td>
<td>12th</td>
</tr>
<tr>
<td>Mike</td>
<td>Male</td>
<td>African American</td>
<td>19</td>
<td>12th</td>
</tr>
<tr>
<td>Josh</td>
<td>Male</td>
<td>African American</td>
<td>18</td>
<td>12th</td>
</tr>
<tr>
<td>Kory</td>
<td>Male</td>
<td>African American</td>
<td>19</td>
<td>12th</td>
</tr>
</tbody>
</table>

(table cont’d)
<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
<th>Age</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles</td>
<td>Male</td>
<td>African American</td>
<td>18</td>
<td>11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Bianca</td>
<td>Female</td>
<td>African American</td>
<td>18</td>
<td>12&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Lisa</td>
<td>Female</td>
<td>African American</td>
<td>18</td>
<td>11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Emergent Themes**

For the qualitative phase, data captured through the individual interviews were analyzed using qualitative data interpretation techniques to answer the following research question:

RQ1: How do high-risk, African American youth describe the educational, familial, and social processes and experiences that promote or impede academic and workforce pursuits?

Student responses were included to support thematic discovery. The following five themes emerged: 1) educational transitions and risk factors, 2) future goals and aspirations, 3) parental support and involvement, 4) peer exposure and social acceptance, and 5) quality and character of school life.

**Theme 1: educational transitions and risk factors.** The first theme, educational transitions and risk factors, captured youth perceptions of their 9<sup>th</sup> grade transition and associated risk factors referenced by youth. All youth described their transition to and adjustment in the 9<sup>th</sup> grade as a troubling time period. In addition, they reported experiencing more challenging academics and less social-emotional support. When asked about the circumstances surrounding their enrollment into the alternative high school, each student reported problems that persisted from either their 8<sup>th</sup> or 9<sup>th</sup> grade years in a traditional school setting. For example, Dena reported, “At my old school, I had got behind and failed the 9<sup>th</sup> grade. I heard about this school helping you get into your right grade so this is the reason why I came.”

A number of academic risk factors were referenced by youth as impeding educational and workforce pursuits. The first common factor identified was academic failure. Each youth
reported a history of failing courses and repeating grade levels. For example, when discussing barriers to achievement, Josh stated, “Not passing my classes or end of course tests.” Some youth referenced a lack of school engagement as a risk factor and indicated bouts of behavioral, cognitive, and emotional disengagement. Victoria reported, “It’s good to have it [education] because you gone need it in the future, but it get boring. Like coming to school, period, is boring and doing homework is boring.” Other participants referenced the number of suspensions and expulsions as risk factors. These youth reported unfair disciplinary practices and procedures and inconsistent rule enforcement as primary reasons for being removed from the instructional settings. The following statement was made by Mike:

I was suspended for 15 days. In the moment leading up to me getting put out, I didn’t think what I said was going to go as far as it did. You know, I honestly thought that I could just tell the people that I’m sorry. I didn’t mean what I said and, you know, everything would be good, but it wasn’t. It led to them calling the police, it led to them recommending me for expulsion, and then it also led to me having to get a court date.

Similarly, Bianca reported:

Every time I used to get suspended, I felt like they did that bad. It ain’t supposed to be that way. They did that bad. Like [laughs] they shouldn’t have suspended me. Alright, like I got suspended cuz the teacher she had jumped in something that wasn’t for her. So me and my teacher talking, and she gone tell me something. And so when I went down to my dean of students and told him everything that happened, I ain’t go down there and lie to him. He still suspended me. I felt like that was petty.

A common experience reflected by respondents was a disconnect between students’ and school administration perceptions of students’ behavior.

**Theme 2: future goals and aspirations.** The second theme, future goals and aspirations, captured youths’ educational and career expectations and their appraisals of the value of an education and its utility to their future. Youth unanimously agreed that education is important and is a gateway to success. Further clarified, youth described education as a way out or an
escape from current circumstances such as low family SES and exposure to impoverished communities. This was demonstrated in the following quote from Gilden:

> Without an education you can’t do nothing in life, you can’t get nowhere. At first, I didn’t use to look at it like that, but now I look at it like that. [At first, I was] like forget an education, I don’t need no education. It’s what you need to survive. Without education, you can’t do nothing. You can’t get no job you want. You can’t do none of that.

In this account, former perceptions of disconnection were evident in the value of education, but Gilden’s attitude appeared to change. Valuing education and vocation is an indicator of movement from disconnection to social engagement and positive personal development.

For these high-risk youth, success was defined as being self-sufficient in adulthood. For example, Mike stated:

> I just want to be successful and you know not have to be looking for my next hand out. Having my own, not necessarily having 5 different cars or 3 different houses, but having a single nice car and a nice house somewhere in a nice neighborhood.

Similarly, Charles reported:

> I don’t won’t to end up like some people in my family and I’m just gone keep it like that. I want something to show for when I get older and do decide to have kids I can show them like hey this is what you do.

All youth contend that self-sufficiency is desired in adulthood. Characteristics of this included having a career and being financially stable, living independently, having access to transportation, and not needing governmental payments or assistance. Despite the social narratives regarding this population, each youth expressed expectations about pursuing education at least at the high school level of completion and being gainfully employed. Beyond this, some students reported a desire to pursue postsecondary education. For example, Mike described:

> Well I know that it [education] is important and you know you need education to get further in life, because most people think that Black people are ignorant. So you know you need education to prove to them, well yeah I am Black, but I am also well-educated.
Overall, youth had favorable attitudes about pursuing educational and career goals and were able to formulate steps to achieving these goals. Some youth verbalized barriers such as academic deficits and lack of skill sets for desired occupations.

**Theme 3: parental support and involvement.** The third theme, parental support and involvement, captured the range of relationships high-risk youth experience with their parents regarding their schooling and education. Specifically, this theme encompasses supportive and encouraging conversations with parental figures who are actively participating in youths’ educational and workforce pursuits. On one end of this relationship spectrum, some youth described limited parental contact and not having much of a relationship with their parents due to circumstances beyond their control. For example, Kory described:

Yeah there’s a lot of stuff that has gotten in my way in life. Like I ain’t really live with my momma, but it wasn’t by choice. I mean it wasn’t because I couldn’t, it was by me, like I wanted to live with my grandfather, my momma daddy. I lived with him as a baby until I was like nine, but I would go to my momma and spend like a month over there. Then I would go back to DD house, that’s what I called him, but when I was nine my momma ended up going to the federal penitentiary and I had to stay with my daddy. Me and my daddy didn’t have no close relationship and my grandfather died when I was thirteen. That’s who I knew like I didn’t really know my momma and I didn’t know my daddy. So it kind of really, I started looking at everything different like I ain’t had nobody to talk to, I ain’t have nobody I could just be like this and this and this, I ain’t have nobody. My daddy was just like ‘you live your life how you want to, you do what you do you know.’ All he did was kept a roof over my head. I provided for myself. I lived a grown life at the age of thirteen, I was doing stuff grownups were doing.

Many youth echoed Kory’s feelings, in that they did not have a relationship with their father beneath the surface if at all present. This type of interaction lacked depth and provided no sustenance for educational or workforce pursuits. Moreover, the majority of youth yearned for the support and involvement provided by mothers over father figures. However, any parental absence (one or both) was perceived as a detriment to youths’ transition into adulthood and could
be understood to be a foundational experience in disconnection at the most basic emotional level in youth development.

On the other end of the relationship spectrum several youth described a supportive and connected relationship with parents, particularly their mothers. Youth who indicated the presence of support and involvement described their interactions as positive, encouraging, and motivating for their educational and workforce pursuits. These characteristics are demonstrated in the following conversation with Gilden.

Interviewer: What keeps you on track with coming to school and keeping your grades up? Motivating you to finish?

Gilden: Knowing I’m finna finish and I ain’t lying my momma be motivating me to finish. She was a big part in me finna finish school to.

Interviewer: What are some of the things you would hear her say?

Gilden: [laughs] My momma would curse me; she would say if you don’t go to school I don’t know what you would expect to do. Like how you gone live? You need an education. That’s all she be telling me about.

Similarly, Dena described her relationship with her mother as encouraging as she recalled a conversation with her mother about future planning. She stated:

My mother told me ‘never give up, don’t hold back and as far as the college situation don’t wait a year, just go ahead and get into it so it don’t hold you back even further from having a career.’

For high-risk, African American youth, parental involvement extends beyond parents’ physical presence in their child’s school. A prevalent characteristic included parent-student discussions about school-related and workforce topics. This dialogue conveyed to youth the message that education and workforce are important to parents and, in result, should be important to the youth as well. Data captured through student interviews revealed that there was a general consensus that parental attitudes toward educational and workforce pursuits were
instrumental in youths’ transition to adulthood. Specifically, most youth reported that parents had favorable attitudes toward education despite their very own educational and workforce attainment levels. Bianca reported, “My mother wanted better opportunities for me.” Similarly Josh reported:

They [parents] motivate me to come to school and get an education, because you know none of my parents have high school diplomas. But my mom is very big on school. You know if you don’t feel like it she make you. Because I feel like she feel like school is important, and I feel like school is important too.

For some youth, other features of parental involvement included consistent parental monitoring and the direct action by parents in the learning process of youth. An example of the latter was demonstrated in the following quote from Lisa.

My momma she be always telling me ‘I graduated from high school, you know that I could help you with this.’ She’ll a try to help me, but I like never go to her because she have little children and they need help too. So I just don’t.

Although Lisa’s mother communicated a sense of value toward Lisa’s education, the reality is that her time is spent caring for her younger children. As a result, Lisa may be left with a sense that the actual support from her mother is not readily available.

**Theme 4: peer exposure and social acceptance.** The fourth theme, peer exposure and social acceptance, referred to peer associations and the varying types of interactions. Youth had mixed perceptions about peer contact in the alternative school setting, but unanimously agreed that there was an overwhelming desire to “fit in.” Some youth consistently portrayed their peer interactions as negative or competitive, resulting in not feeling connected to school due to those interactions. Negative peer interactions were described as “messy students” with a lack of staff intervening, “people dragging you down,” or a safety concern due to student arguments and threats of weapons. An example of a negative interaction with a desire to be socially accepted
was demonstrated in the following excerpt with Lisa as she described interactions with her friends at school.

Interviewer: Can you describe any barriers to achieving your future goals?

**Lisa**: People

Interviewer: Talk a little bit more about that

**Lisa**: I hate people. They picky and choosy. I mean it’s like no matter what you do they gone try and drag you down. They gone talk about you either way it goes, if you doing good in life or bad. Everything get talked about.

Interviewer: You are talking about peers at school?

**Lisa**: Yes ma’am. My friends a tell me like [says name] you not gone do it. They be like I’m too goofy, I’m not gone be able to make it [in life].

Lisa continued to discuss how she internalizes unconstructive comments from friends and that it negatively impacts her level of confidence regarding her future pursuits. This student was aware of the influential relationship, but rationalized her need to maintain friendships and be socially accepted. Similarly, when asked to describe barriers to achieving future goals, Charles indicated that he is easily distracted and influenced by peers at a detriment to his educational and workforce pursuits.

Opinions diverged on peer exposure as some youth reported peer interactions as supportive and socializing. The term “supportive” was further clarified as emotional and informational support. Youth felt supported when peers were available to talk to them about future endeavors and when advice was provided on how to pursue educational and workforce goals. Mike described peers as supportive stating, “They just want you to be your best.” In the same vein, Kory reported that he attended school for the specific purpose of socializing and “hanging out” with his friends. Despite the nature of peer interactions, for young people, peer groups provide an arena in which youth can learn, clarify, and maintain norms of social
behaviors as well as practice behaviors promoting social competence during a time when emerging youth are forming their identity and establishing autonomy from parents (APA, 2002). Thus, peer relationships have the potential to promote as well as protect against social disconnectedness in the young adult years (i.e., no school or work).

**Theme 5: quality and character of school life.** The final theme evident in the findings was quality and character of school life. This theme embraces students’ experiences with educational institutions and the degree to which those experiences promoted or impeded educational and workforce pursuits. Specifically, the theme highlights students’ attitudes about traditional versus alternative school settings, teaching and learning environments, school safety, interpersonal relationships, and the structural organization of the institutional environments. Youth were asked to compare educational settings and throughout the interviews, most youth reported preference for the alternative school setting. This preference was due to reports of smaller school and class sizes creating an atmosphere of support and more individualized attention. Students indicated that these factors promoted more academic engagement and aided in overall school success. Gilden described:

**Interviewer:** So how does this school compare to the school you were at?

**Gilden:** It’s better, I feel like it’s better. Cuz the teachers you know cuz we ain’t that many students on campus like regular school so they get to help us a little bit more than other teachers. I feel like the teachers and staff [here] they really work with you and try to encourage you. Like [guidance counselor] she done helped me out too with my Edgenuity; they really help you. Like at [other school] they do the same too, it’s just a big school and this school is smaller so they can do more here than what they do at the other school.

In regards to quality of teaching and learning, these young adults unanimously agreed that education should be both relevant and applicable to students’ current and future lives. In addition, being in an environment where the teacher expresses the value of education and where
the academic expectations are high proves useful toward future success. Most youth clarified that they did not want to be overlooked due to the academic deficits that they present with.

One of the biggest challenges indicated by youth, however, was the computer-based learning in the alternative school setting. According to each student, the computer-based style of learning replaced classroom instruction and limited the teacher-student interactions that the young adults preferred. Additional barriers reported were some students’ perceptions of the lack of additional academic assistance for reading deficits and the lack of academic resources. An example was quoted by Dena:

More academic resources. As far as Edgenuity [computer-based learning tool] I hate it. More books, learning books, and stuff. Delete Edgenuity all the way, the only way they should have Edgenuity is for people that have failed their class and want to get ahead.

For African American youth, establishing a connection with school staff was pivotal to educational and workforce pursuits. This was described as having access to school personnel (e.g., teachers, principal, school counselor) and being able to talk to them about college access and credits, workforce opportunities, or personal problems. Youth reported feeling a sense of support and social integration as a result. Kory expressed his reliance on school and school personnel.

I was one of them children you can say everybody be like ghetto babies or hood babies. I was one of them. I was in some situations and it was like I felt like I didn’t have nowhere to go, but school. It was like I felt school kept me out of a lot of stuff. Like if it wasn’t for school staff, I feel like I would be in jail or dead or something.

Similarly, Dena described teacher-student encounters as resembling a nurturing, parent-child interaction. She stated, “As far as relationships with teachers, it’s like having a second mom.” However, not all students felt they had a sense of connection with school personnel in the alternative school setting. For example Josh reported, “I ain’t never
really depended on school, I never really needed them for anything.” Some youth reported barriers to accessing school staff for support related to inconsistent patterns of staff behaviors. For example, Mike described:

There are days where a teacher might, you know, be in a bad mood and just gets to yelling and screaming and stuff so you just like yeah ok it’s time to go home.

Youth had mixed perceptions about school safety, but unanimously agreed that feelings of safety impacted academic performance. Some students reported a hindrance to the academic climate due to the abundance of school fights, threats of weapon possessions, and a lack of intervening on bullying behaviors. Many youth also reported a desire for clear and consistent rule setting by school personnel.

The school setting marks an arena for youth to receive education and knowledge about educational and workforce opportunities post high school completion. For this population, it is imperative that school personnel realign services provided to youth to match the varying needs of each youth. In doing so, this helps youth make the connection between the day to day experiences of school and education and their future self as contributing, productive members of society that makes sense to them.

Framing the Quantitative Analysis

Figure 5.1. Qualitative themes and variable selection from HSLS:09 database. Source: U.S. (fig. caption cont’d.)
Phase Two: Quantitative Results

For the quantitative phase, variables were selected from the HSLS:09 dataset based on qualitative themes. A multilevel logistic regression model was used to answer the remaining research questions:

RQ2: What student-level factors are associated with being disconnected in the young adult years?

RQ3: What school-level factors are associated with being disconnected in the young adult years?

RQ4: What effects do student-level factors have on being disconnected in the young adult years when considering school contextual factors?

RQ5: Does peer affiliation moderate the relationship between parental engagement and the odds of being disconnected in the young adult years?

Descriptive Statistics

Sociodemographic characteristics of the analytic sample (i.e., African American students in public schools) are presented in Table 5.2. Among the 1,210 participants, 51% were male and 49% were female. The students’ age range during base year was 14-18 years old. The average family SES was -0.35 (0.02). Fifty-two percent of the sample reported living in a two-parent household. In regards to educational factors, 64% of the sample reported high educational expectations (e.g., completing an associate’s degree or beyond). Twenty-seven percent of the sample reported repeating at least one grade and 36% reported a history of at least one suspension and/or expulsion.
Table 5.2. Descriptive Statistics for Analytic Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>(%)</th>
<th>M (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconnected Young Adult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td><strong>Student Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male [reference]</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Family SES</td>
<td>-0.35 (0.02)</td>
<td></td>
</tr>
<tr>
<td>Family Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-parent [reference]</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>Single- or no parent</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>Repeated Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Suspended/Expelled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Educational Expectations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low [reference]</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>School Engagement</td>
<td>-0.06 (0.03)</td>
<td></td>
</tr>
<tr>
<td>Parental Engagement</td>
<td>8.12 (0.11)</td>
<td></td>
</tr>
<tr>
<td>Peer Affiliation</td>
<td>4.52 (0.03)</td>
<td></td>
</tr>
<tr>
<td><strong>School Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Size</td>
<td>93.56 (0.38)</td>
<td></td>
</tr>
<tr>
<td>School Type (Traditional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>School Climate</td>
<td>-0.89 (0.04)</td>
<td></td>
</tr>
<tr>
<td>Mean School SES</td>
<td>-0.32 (0.01)</td>
<td></td>
</tr>
<tr>
<td>Mean School Belongingness</td>
<td>-1.70 (0.04)</td>
<td></td>
</tr>
<tr>
<td>Number of Students</td>
<td>1210</td>
<td></td>
</tr>
<tr>
<td>Number of Schools</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

Note: %= percentage for categorical variables; M(SE)= mean (standard error of mean) for continuous variables.

**Correlation Analysis**

Correlation analysis of study variables found that family structure ($r = 0.10, p < .0001$), repeating a grade ($r = 0.13, p < .0001$), being suspended/expelled ($r = 0.13, p < .0001$), and peer affiliation ($r = 0.07, p < .0001$) were significantly and positively related to being a disconnected young adult. In addition, family SES ($r = -0.19, p < .0001$), student educational expectations ($r = -0.13, p < .0001$), school engagement ($r = -0.10, p < .0001$), parental engagement ($r = -0.15, p < .0001$), school climate ($r = -0.07, p < .0001$), average school SES ($r = -0.17, p < .0001$), and average school belongingness ($r = -0.26, p < .0001$) were negatively related to being a disconnected young adult. At the student level, relatively higher correlations were between the following variables: family SES and family structure ($r = -0.31, p < .0001$), family SES and parental engagement ($r = 0.36, p < .0001$), student educational expectations and parental engagement ($r = 0.26, p < .0001$), school engagement and parental engagement ($r = 0.21, p < .0001$), school engagement and peer affiliation ($r = -0.23, p < .0001$), and parental engagement and peer affiliation ($r = -0.22, p < .0001$). The higher correlations at the school level were between school climate and average school SES ($r = 0.37, p < .0001$) and school climate and school size ($r = -0.21, p < .0001$).

Tolerance and VIF were produced for each predictor variable in the study; all variables indicated a value of less than 10 for VIF and no tolerance values fell below the threshold of 0.1. In addition, the requirements for eigenvalue and corresponding condition index were satisfied, implying no concerns over multicollinearity.

**Multilevel Analysis**

SAS PROC GLIMMIX was used to create a two-level MLLR model that assessed the effects of student- and school-level predictors on the odds of being a disconnected young adult among a national sample of African American high school students. Student weights were
included in the analyses. Table 5.3 presents the estimated regression coefficients and Table 5.4 presents the odds ratios for the multilevel logistic regression models.

Table 5.3 Estimated Regression Coefficients for the Multilevel Logistic Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Unconditional Model</th>
<th>Model 2 1+ Student-level factors</th>
<th>Model 3 2+ Interaction term</th>
<th>Model 4 3+ School-level factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student-level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.67* (0.02)</td>
<td>0.09* (0.02)</td>
<td>0.10* (0.02)</td>
<td>-0.70* (0.04)</td>
</tr>
<tr>
<td>SES</td>
<td>-1.57* (0.02)</td>
<td>-1.57* (0.02)</td>
<td>-1.57* (0.02)</td>
<td>-1.76* (0.03)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>-0.13* (0.02)</td>
<td>-0.12* (0.02)</td>
<td>-0.12* (0.02)</td>
<td>-0.02 (0.04)</td>
</tr>
<tr>
<td>Repeat Grade</td>
<td>2.06* (0.03)</td>
<td>2.06* (0.03)</td>
<td>2.06* (0.03)</td>
<td>4.18* (0.05)</td>
</tr>
<tr>
<td>Suspended/Expelled</td>
<td>0.62* (0.03)</td>
<td>0.62* (0.03)</td>
<td>0.62* (0.03)</td>
<td>-1.09* (0.04)</td>
</tr>
<tr>
<td>Educational Expectations</td>
<td>0.82* (0.03)</td>
<td>0.83* (0.03)</td>
<td>0.70* (0.04)</td>
<td></td>
</tr>
<tr>
<td>School Engagement</td>
<td>-0.54* (0.01)</td>
<td>-0.54* (0.01)</td>
<td>-0.54* (0.01)</td>
<td>-0.60* (0.02)</td>
</tr>
<tr>
<td>Parental Engagement</td>
<td>-0.21* (0.00)</td>
<td>-0.20* (0.02)</td>
<td>-0.20* (0.02)</td>
<td>-0.18* (0.00)</td>
</tr>
<tr>
<td>Peer Affiliation</td>
<td>0.30* (0.01)</td>
<td>0.32* (0.03)</td>
<td>0.32* (0.03)</td>
<td>0.82* (0.02)</td>
</tr>
<tr>
<td><strong>School-level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School size</td>
<td>-0.05 (0.07)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School type</td>
<td>0.53 (2.25)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School climate</td>
<td>1.07 (0.71)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean School SES</td>
<td>3.37 (2.46)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean School BEL</td>
<td>0.04 (0.60)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Affil*Parental Eng</td>
<td>-0.001 (0.004)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model Fit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2LL</td>
<td>252681.9</td>
<td>83882.40**</td>
<td>83910.57</td>
<td>48359.74</td>
</tr>
<tr>
<td>AIC</td>
<td>252685.9</td>
<td>83904.40</td>
<td>83934.57</td>
<td>48391.74</td>
</tr>
<tr>
<td>Number of Students</td>
<td>795</td>
<td>470</td>
<td>470</td>
<td>285</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>150</td>
<td>140</td>
<td>140</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: *p <.05; **=likelihood ratio test significant; ICC=.38; Values based on SAS PROC GLIMMIX. Entries show parameter estimates with standard errors in parentheses; Estimation Method=Laplace.

Table 5.4. Estimated Odds Ratios for Multilevel Logistic Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Odds ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1</td>
</tr>
<tr>
<td><strong>Student-level</strong></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.10* (1.05-1.15)</td>
</tr>
<tr>
<td>SES</td>
<td>0.21* (0.20-0.22)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>0.88* (0.84-0.92)</td>
</tr>
<tr>
<td>Repeat Grade</td>
<td>7.85* (7.41-8.31)</td>
</tr>
<tr>
<td>Suspended/Expelled</td>
<td>1.86* (1.77-1.95)</td>
</tr>
<tr>
<td>Educational Expectations</td>
<td>2.27* (2.16-2.39)</td>
</tr>
<tr>
<td>School Engagement</td>
<td>0.58* (0.57-0.60)</td>
</tr>
<tr>
<td>Parental Engagement</td>
<td>0.81* (0.81-0.82)</td>
</tr>
<tr>
<td>Peer Affiliation</td>
<td>1.36* (1.32-1.40)</td>
</tr>
<tr>
<td><strong>School-level</strong></td>
<td></td>
</tr>
<tr>
<td>School size</td>
<td>0.95 (0.83-1.09)</td>
</tr>
<tr>
<td>School type</td>
<td>1.69 (0.02-42.28)</td>
</tr>
<tr>
<td>School climate</td>
<td>2.91 (0.71-11.90)</td>
</tr>
<tr>
<td>Mean School SES</td>
<td>29.09 (0.23-31.30)</td>
</tr>
<tr>
<td>Mean School BEL</td>
<td>1.04 (0.32-3.41)</td>
</tr>
</tbody>
</table>

Note: *p<.05; CI=confidence interval.

**Unconditional model.** The model building process began with the unconditional model with no predictors (Model 1, only random effect for intercept). This model provided an overall estimate of the likelihood of being a disconnected young adult for students at a typical school. The estimated intercept was -0.67 and represented the log-odds of being a disconnected young adult at a typical school. To be more meaningful, the log-odds of success was converted into predicted probabilities using the formula: \( \phi_{ij} = e^{\eta_{ij}} / (1 + e^{\eta_{ij}}) \) where \( e \approx 2.72 \), \( \phi_{ij} \) is the probability of success, and \( 1 - \phi_{ij} \) is the probability of failure (Ene et al., 2015; Snijders & Bosker, 2012). The probability of success at a typical school for the analytic sample was .338 and the probability of failure was .662.
The unconditional model also provided information about the variability of being a disconnected young adult between schools through the calculation of the ICC. In MLLRs, there is assumed to be no error at level-1, therefore, a slight modification is needed to calculate the ICC. The ICC was calculated using the formula: $\tau^2 / (\tau^2 + \sigma^2)$, where $\sigma^2 = \pi^2/3 = 3.29$, the variance of logistic distribution for the level-one residual (Snijders & Bosker, 2012; Sommet & Morselli, 2017). The ICC for the unconditional model was 0.38, which indicated that 38% of the variability in being a disconnected young adult was accounted for by schools. The remaining variation, 62%, was due to differences among students within schools. The results indicated that there was a statistically significant amount of variability in the log-odds of being a disconnected young adult between the schools in the analytic sample $\tau^2 = 2.05; z(150) = 7.32, p < .0001$. The estimates suggested that schools differ in the probability of being a disconnected young adult and that there was even more variation among students within schools. The relatively high ICC indicated that the application of multilevel analysis was warranted. The \(-2LL\) for the unconditional model was 252681.9.

**Level 1 (within-school) model.** The second model included the nine student-level variables as fixed effects and the random intercept (Model 2). The intercept for this model was -6.58, $p < .0001$. All student-level variables were significantly associated with the odds of being a disconnected young adult. Significant fixed effects included gender (0.09, $p = 0.00$, OR = 1.10), family SES (-1.57, $p < .0001$, OR = 0.21), family structure (-0.13, $p < .0001$, OR = 0.88), repeat grade (2.06, $p < .0001$, OR = 7.85), suspended/expelled (0.62, $p < .0001$, OR = 1.86), student educational expectations (0.82, $p < .0001$, OR = 2.27), school engagement (-0.54, $p < .0001$, OR = 0.58), parental engagement (-0.21, $p < .0001$, OR = 0.81), and peer affiliation (0.30, $p < .0001$, OR = 1.36).
These findings suggest that males had a very minimal increase, 10%, in the odds of being disconnected in the young adult years compared to females. Students were 4.8 times less likely to be disconnected when family SES increased by one unit. In addition, students from a two-parent household were 12% less likely to become disconnected in young adulthood compared to students from single-parent or no parent households. Students who repeated a grade or been suspended/expelled at least once had 7.85 and 1.86 times the odds of being a disconnected young adult compared to students with no history of grade repetitions and suspension/expulsions, respectively. Students with low educational expectations (e.g., high school/GED completion or below) were 2.27 times more likely to be disconnected than students with high educational expectations. Conversely, students were 1.72 times less likely to be disconnected when school engagement increased by one unit. In addition, students were 1.23 times less likely to be a disconnected young adult when parental engagement increased by one unit. Students were 1.36 times more likely to be disconnected when peer affiliation scores increased by one unit. That is, high peer affiliation scores indicated lower peer orientation to school.

**Level 1 (within-school) model + interaction term.** The third model included the student-level variables as fixed effects, an intra-level interaction term, and the random intercept (Model 3). The intercept for this model was -6.71, p <.0001. The nine student-level variables remained significantly associated with the odds of being a disconnected young adult. An interaction term was added to Model 3: peer affiliation x parental engagement. Results indicated that the moderating effect of peer affiliation and parental engagement on the odds of being a disconnected young adult was not statistically significant (-0.001, p=0.87). The interaction term was eliminated from the final model.
**Level 2 (between-school) model.** The final model included both student- and school-level variables as fixed effects and the random intercept (Model 4). This model looked at whether the variation in being a disconnected young adult could be better explained by school characteristics rather than the characteristics of students within the schools. The intercept for this model was -2.08, p=0.76. Eight of the nine student-level variables remained significantly associated with the odds of being a disconnected young adult, while none of the five school-level variables were statistically associated with the outcome. Family structure (-0.02, p=0.61), school size (-0.05, p=0.44), school type (0.53, p=0.82), school climate (1.07, p=0.14), mean school SES (3.37, p=0.17), and mean school belongingness (0.04, p=0.95) were not associated with being a disconnected young adult.

Significant student-level fixed effects included gender (-0.70, p<.0001, OR= 0.50), family SES (-1.76, p<.0001, OR= 0.17), repeat grade (4.18, p<.0001, OR= 65.24), suspended/expelled (-1.09, p<.0001, OR= 0.34), student educational expectations (0.70, p<.0001, OR= 2.02), school engagement (-0.60, p<.0001, OR= 0.55), parent engagement (-0.18, p<.0001, OR= 0.83), and peer affiliation (0.82, p<.0001, OR= 2.27).

When considering school contextual factors, males had a 50% reduction in the odds of being disconnected in the young adult years. Students were 5.8 times less likely to be disconnected when family SES increased by one unit. Students who repeated a grade had significantly increased odds of being disconnected. Conversely, students who had no history of suspension or expulsion were 2.94 times less likely to be disconnected. Students with low educational expectations were 2.02 times more likely to be disconnected than students with high educational expectations. Students were 1.82 times less likely to be disconnected when school engagement increased by one unit. In addition, students were 1.20 times less likely to be a
disconnected young adult when parental engagement increased by one unit. Students were 2.27 times more likely to be disconnected when peer affiliation scores increased by one unit. That is, high peer affiliation scores indicated lower peer orientation to school. The -2LL for the final model was 48359.74.

Models were evaluated for best fit by conducting a deviance test. The deviance is a statistic equal to -2LL ratio and measures the fit across models predicting the same outcome variable. The -2LL values were compared between Model 1 and Model 2, Model 2 and Model 3, and Model 3 and Model 4. The deviance value should decrease at least by half if the model’s fit is increasing once predictors are added, indicating that the predictive power increases over the unconditional model (Model 1; Nelder & Wedderburn, 1972). The deviance value of 25268.19 for the unconditional model was reduced by 67% once student-level predictors were added to the model, which suggest that the model’s fit improved when including student-level predictors. When comparing Model 2 and 3, the deviance value remained relatively unchanged as interaction term was included in the model, suggesting no significant improvement in the model’s predictive power. When including school-level factors, the deviance value of 83910.57 for Model 3 was reduced by 42% suggesting minimum improvement.

Supplemental analyses. As indicated in the methodology, the quantitative analyses modeled the variation of the outcome variable which involved removing schools with a mean of 0 (i.e., schools that had students that were not disconnected in young adulthood) and a mean of 1 (i.e., schools that had all students that were disconnected in young adulthood). This accounted for the rare event of the outcome variable in the analytic sample and was necessary to prevent inflated ICCs and inaccurate parameter estimates (King & Zeng, 2011).
Supplemental analyses included grouping the means for the outcome variable for the 510 public schools that contained African American students to see how students in schools differ descriptively on school-level measures. The grouping was as follows:

0 for not disconnected (no event)
1 for some disconnected (some event)
2 for all disconnected (all event)

Table 5.5 presents the means of school-level variables grouped by the mean outcome variable (i.e., being a disconnected young adult).

Table 5.5. Mean School level Variables Grouped By Mean Outcome Variable

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>825 students</td>
<td>1210 students</td>
<td>80 students</td>
</tr>
<tr>
<td></td>
<td>315 schools</td>
<td>150 schools</td>
<td>45 schools</td>
</tr>
<tr>
<td>School Size (20-150)</td>
<td>97.07</td>
<td>93.97</td>
<td>95.89</td>
</tr>
<tr>
<td>Region (Northeast, Midwest, South, West)</td>
<td>2.70</td>
<td>2.51</td>
<td>2.56</td>
</tr>
<tr>
<td>Locale (City, Suburb, Town, Rural)</td>
<td>1.95</td>
<td>2.06</td>
<td>1.61</td>
</tr>
<tr>
<td>Percent Black</td>
<td>2.26</td>
<td>3.77</td>
<td>2.14</td>
</tr>
<tr>
<td>Percent Hispanic</td>
<td>1.60</td>
<td>0.17</td>
<td>1.24</td>
</tr>
<tr>
<td>Percent White</td>
<td>4.08</td>
<td>1.23</td>
<td>4.96</td>
</tr>
<tr>
<td>Free Lunch</td>
<td>3.64</td>
<td>4.45</td>
<td>2.66</td>
</tr>
<tr>
<td>School Climate (-4.22-1.97)</td>
<td>-0.54</td>
<td>-0.72</td>
<td>-1.27</td>
</tr>
<tr>
<td>Percent 9th graders repeating 9th grade</td>
<td>0.78</td>
<td>0.07</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Note: Percent Black, Percent White, and Free lunch (0=0%, 1=1-10%, 2=11-20%, 3=21-30%, 4=31-40%, 5=41-50%, 6=51-60%, 7=61-70%, 8=71-80%, 9=81-90%, 10=91-99%, 11=100%); Percent Hispanic (0=0%, 1=1-10%, 2=11-20%, 3=21-30%, 4=31-40%, 5=41-50%, 6=51-60%, 7=61-70%, 8=71-80%, 9=81-90%, 10=91-100%); Percent 9th graders repeating 9th grade (0=0%, 1=1-5%, 2=6-9%, 3=10-14%, 4=15-19%, 5=20% or more).


For not disconnected in young adulthood, there were 825 students in 315 schools. For some disconnected, there were 1210 students in 150 schools (used for multilevel analysis) and for all disconnected, there were 80 students in 45 schools. Results revealed that for schools with no event and all event, there were higher mean scores for percent Hispanic and percent White. For schools with some event, there were a higher percentage of students who received free and
reduced lunch. There were stark differences in school climate and percent of 9th graders repeating 9th grade for schools with all event compared to schools with no or some event. Figure 5.2 presents box plots of the data.

Figure 5.2. Box plots of mean school-level variables grouped by mean outcome variable. Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. High School Longitudinal Study of 2009 (HSLS:09) Base-Year and Second Follow-Up Restricted Use File.
CHAPTER 6. DISCUSSION AND CONCLUSIONS

In this chapter, the mixed methods approach and the results of the current study are summarized. An integrative approach to predicting youth disconnection is presented and then reviewed in the context of relevant literature. A brief discussion about theoretical and practice and policy implications follows. This chapter concludes with a discussion of limitations and future directions for research.

Study Overview

This researcher employed an exploratory sequential mixed methods design to examine features of social context that explain how African American youth become disconnected from education and employment. This multiphase approach involved analyzing qualitative data collected from nine student participants, who were identified as high risk of disconnection, to provide insights into how contextual features in educational and familial settings shape pathways to disconnection. From the in-depth analysis of qualitative data, five themes emerged and were used to inform variable selection from the HSLS:09 database. The national database provided a sample of 1,210 African American students enrolled in 150 public high schools. Quantitative analysis of selected student- and school-level variables provided empirical evidence on the contextual effects relevant to the odds of becoming a disconnected young adult. The findings for each research question are presented below.

Summary of Findings

Social Processes and Experiences that Influence Academic and Workforce Pursuits

Research question one was posed to develop a greater understanding of African American high schools students and the kinds of experiences in their social environment that influence their trajectories into adult roles. The respondents mentioned difficulty with their 9th
grade transition and identified academic risk factors such as failing courses, repeating grade
levels, history of suspension and expulsion, and lack of school engagement as factors that
impede educational and workforce pursuits.

Respondents unanimously agreed that education was important and vital to their future
pursuits. African American students had high expectations for academic and workforce success,
despite perceived barriers (e.g., academic deficits, lack of skill sets for desired occupations).
Many of the experiences with perceived barriers to academic and vocational success noted by
this study’s participants were similar to those expressed by older disconnected young adults in
prior investigations. For example, previous research with young adults between the ages of 16
and 24, who had neither been in school nor employed for a period of at least six months, found
that at least 75% of participants reported not having enough education, skills, or work experience
to pursue academic and workforce goals (Bridgeland & Milano, 2012; Miller, 2018).

Respondents expressed a desire and need for meaningful relationships. This finding
encompassed relationships with parents, peers, and school personnel. Interestingly, supportive
and encouraging conversations with parental figures who actively participated in youths’
educational and workforce pursuits were vital. This dialogue, centered on discussions about
school-related and workforce topics, conveyed to youth the message that education and
workforce were important to parents and, in result, should be important to the youth as well.
Respondents agreed that parental involvement extended beyond parents’ physical presence in
their schools. The respondents suggested that peer interactions were important and influential
despite the quality of those interactions. Respondents reported an overwhelming desire to “fit in”
with their peer group. For youth, peer affiliations were inevitably important, but not all peer
influences were equal. Peer relationships had the potential to promote as well as protect against the odds of disconnection in young adulthood.

For African American youth, establishing a connection with school staff was pivotal to educational and workforce pursuits. This was described as having access to school personnel (e.g., teachers, principal, school counselor) and being able to talk to them about college access and credits, workforce opportunities, or personal problems. Respondents reported feeling a sense of support and social integration as a result. Beyond this, respondents voiced additional experiences with educational institutions and the degree to which those experiences promoted or impeded educational and workforce pursuits. Respondents reported a preference for smaller school and class sizes and education that was relevant and applicable. Moreover, respondents unanimously agreed that feelings of safety impacted academic performance. Respondents also reported a desire for clear and consistent rule setting by school personnel.

**Student-Level Factors Associated with Being a Disconnected Young Adult**

Research question two was posed to identify student-level factors associated with the odds of being a disconnected young adult. In Model 2, all student-level variables were significantly associated with the odds of being disconnected. The findings suggested that males had a 10% increase in the odds of being disconnected in the young adult years compared to females. Being from a lower family SES (OR=.21) and from a single-parent or no parent household (OR=.88) significantly increased the odds of being a disconnected young adult. Students who repeated a grade (OR=7.85) had significantly increased odds of being disconnected compared to students who did not repeat a grade. In addition, students with a history of suspension and expulsions were almost two times as likely to be disconnected in the young adult years. Students with low educational expectations (OR=2.27) had significantly increased odds of
being disconnected compared to students with high educational expectations. However, having greater school engagement (OR=0.58), greater parental engagement (OR=0.81), and greater peer affiliation to school (OR=1.36; indicated by lower peer affiliation scores) significantly decreased the odds of becoming a disconnected young adult.

**School-Level Factors Associated with Being a Disconnected Young Adult**

Research question three was posed to identify school-level factors associated with the odds of being a disconnected young adult. The ICC for the unconditional model was 0.38, which indicated that 38% of the variability in being disconnected in young adulthood was accounted for by schools. However, in Model 4 when school-level variables were added, none of the school-level variables were associated with the outcome.

**Impact of Student-Level Factors When Considering School Factors**

Research question four was posed to examine the impact of student-level factors when considering school contextual factors. In Model 4, school factors were added to student-level variables. Eight of the nine student-level variables remained significantly associated with the odds of being a disconnected young adult, while none of the five school-level variables were statistically associated with the outcome.

When considering school contextual factors, being female (OR=.50) and from a lower family SES (OR=0.17) significantly increased the odds of becoming disconnected. Gender, while statistically significant, did not show a clear general relationship (either positive or negative) with the outcome. Students who repeated a grade (OR=65.24) had significantly increased odds of being disconnected compared to students who did not repeat a grade. In addition, students with low educational expectations were two times as likely of being disconnected compared to students with high educational expectations. Students who had no history of suspension or
expulsion (OR=0.34) were almost 3 times less likely to be disconnected in the young adult years. However, having greater school engagement (OR=0.55), greater parental engagement (OR=0.83), and greater peer affiliation to school (OR=2.27; indicated by lower peer affiliation scores) significantly decreased the odds of becoming a disconnected young adult.

**Moderating Relationship Between Parental Engagement and Peer Affiliation**

Research question five was posed to assess if there was an interaction between peer affiliation and parental engagement associated with the odds of becoming a disconnected young adult. An interaction term was added to Model 3: peer affiliation x parental engagement. Results indicated that the moderating effect of peer affiliation and parental engagement on the odds of being a disconnected young adult was not significant (-0.01, p=0.87).

**Predicting Youth Disconnection: An Integrative Approach**

The current study adds to the knowledge gap by using a mixed method approach to examine features of social contexts relevant to the odds of becoming a disconnected young adult. The study focused on within group analysis which allowed for understanding factors distinct to the African American population. The mixed methods approach allowed the researcher to explore pathways to youth disconnection in depth with a few individuals and then allowed for expansion of the findings to a larger sample (Plano Clark & Ivankova, 2016).

Quantitative findings revealed that more than a quarter of the national sample of African American youth were disconnected (i.e., no school or work) 3 years out of high school. In comparison to other racial and ethnic groups, this finding exceeded the 2017 disconnection rate of 17.9% for African American teens and young adults (Lewis, 2019). Moreover, this finding is higher than what has been indicated in past studies where percentages of youth disconnection ranged from 7% to 20% depending on the ages of the youth and methodology (Fernandes-
Alcantara, 2015a). Historically, African American youth have been twice as likely as Caucasian youth to be disconnected (Lewis, 2019).

**Demographic Characteristics**

In previous literature regarding the disconnected youth population, studies have focused heavily on demographic and family background factors to predict disconnection in early adulthood. This study included three demographic variables: gender, family SES, and family structure. Similar to previous findings, being from a single-parent or no parent household and from low family SES were significantly associated with the odds of becoming a disconnected young adult (Besharov & Gardiner, 1999; Fernandes-Alcantara, 2015a; Hair et al., 2005; Hair et al., 2009; MaCurdy et al., 2006). In the literature, these two factors represent clear and measurable markers for youth being at high risk for experiencing disconnection. Results regarding gender have been inconclusive. For example, Hair et al. (2009) found that an equal share of males and females were likely to be disconnected. In other studies, females were more likely to be disconnected (Besharov & Gardiner, 1999; Fernandes-Alcantara, 2015a; Hair et al., 2005). According to MaCurdy et al. (2006), African American males were more likely to experience an episode of disconnection. Results from the current study followed a similar pattern. In Model 2, males had a 10% increase in the odds of being disconnected compared to females, but when school-level variables were entered into Model 4, females had a higher likelihood of being disconnected. One explanation could be the reduced sample size for Model 4 resulting in biased estimates. According to Paccagnella (2011), the bias of fixed parameter estimates decrease with the increase in the number of groups (i.e., schools).
**Student Characteristics**

The qualitative findings revealed a number of educational risk factors such as failing courses, repeating grade levels, history of suspension and expulsion, and lack of school engagement as factors that impede educational and workforce pursuits for African American youth. These data were incorporated into quantitative analysis and results revealed that repeating a grade level showed a statistically positive association to the odds of being disconnected across models. This suggests that students with a history of repeating grades were more likely to be disconnected compared to students with no history of repeating a grade. Similarly, students that had a history of suspensions and expulsions had increased odds of disconnection in early adulthood. In the quantitative sample, African American students had an average school engagement score of -0.06 with scores ranging from -3.36-1.39, and showed a statistically negative association with the odds of becoming a disconnected young adult. That is, for one unit increase in school engagement, the odds of disconnection decreased.

Qualitative findings suggest that education is valued among high-risk, African American youth. Despite social narratives regarding this population, each youth expressed educational expectations at least at the high school level of completion and being gainfully employed. Beyond this some students reported a desire to pursue postsecondary education. In the quantitative sample, 36% reported low educational expectations and 64% reported high educational expectations (e.g., completing an associate’s degree or beyond). Consistent across models, student educational expectations showed a statistically positive association to the odds of being disconnected which suggests that students with low educational expectations (e.g., high school/GED completion or below) were more likely to be disconnected than students with high educational expectations. Previous research on pathways to adulthood have acknowledged the
relevance of individual agency (e.g., high educational expectations) in the association with transition experiences at age 24 (Osgood, Ruth, Eccles, Jacobs, & Barber, 2005).

**Family Characteristics**

Consistent across models, parental engagement showed a statistically negative association to the odds of being disconnected in young adulthood. That is, for one unit increase in parental engagement, the odds of disconnection decreased. African American youth agreed that parental involvement extended beyond parents’ physical presence in schools, and included supportive and encouraging conversations about educational and workforce pursuits.

This finding expands previous research regarding the disconnected youth population. For example, Hair et al. (2005) found parental involvement in school to be a significant predictor of disconnection. In the study, the researchers referred to parental involvement as the amount of participation a parent had when it came to their child’s schooling. However, this concept was measured only by parents’ physical presence in schools (e.g., attendance at PTA meetings, parent-teacher conference, or volunteering; Hair et al., 2005; Hair et al., 2009). The qualitative findings in the current study revealed the importance of considering parent-student discussions in assessing youth disconnection for African American youth. As such, the parental engagement composite was created to reflect qualitative findings. The composite included items such as parent participation in school functions and whether student talked with a parent about coursework, going to college, or adult jobs and careers.

**Peer Characteristics**

From the qualitative findings, respondents contend that peer interactions at school were important and influential irrespective of the quality of those interactions. Quantitative results revealed that peer affiliation showed a statistically positive association to the odds of being
disconnected across models. That is, for one unit increase in peer affiliation scores, the odds of disconnection increased. This finding indicated a lower peer orientation to school and academic success. These results add to previous research conducted by Hair et al. (2009). Hair et al. (2009) found that associating with negative peers (e.g., peers who use drugs, get poor grades, or get into trouble at school) raised the risk of becoming a disconnected young adult.

**School Characteristics**

Limited research has focused on school contextual factors in the prediction of youth disconnection. To date, one study assessed school variables and found that school type (e.g., public vs. private) and an increase in the proportion of African American students in school were associated with higher odds of being disconnected (Rendón, 2014). This current study examined the impact of school size, school type (e.g., traditional), school climate, average school SES, and average school belongingness on youth disconnection. Results revealed that none of the school-level variables were associated with the outcome. This finding should not be interpreted to mean that these variables are not important; however, results from this study suggest that these specific school variables may not be as relevant to youth disconnection as other factors.

In contrast, qualitative findings revealed that African American students’ experiences within educational institutions were important and contributed to their success or lack thereof. Respondents reported a preference for smaller school and class sizes and education that was relevant and applicable. Moreover, respondents unanimously agreed that school safety impacted academic performance. Taken together, the combination of qualitative and quantitative analyses provided more robust results that advance the literature related to the disconnected youth population. Moreover, quantitative findings corroborated what was revealed in the qualitative results with the exception of school characteristics.
Theoretical Implications

The results of this study are interpreted using ecological systems theory, life course theory, and social development model. Taken together, these three theories provide a strong foundation for understanding youth disconnection as a behavior that is influenced by individuals’ interactions with social systems along their developmental trajectory. For this study, individual, family, and peer characteristics exerted a significant influence on the odds of disconnecting in young adulthood for African American youth. Ecological systems theory provides the methodological relevance of studying behavior and human development as a function of its exposure to different settings (Bronfenbrenner, 1977). Therefore, the experiences of African American youth in the home environment and with their peer group could alter patterns of activities and interactions with others with consequent implications for life outcomes.

In the quantitative phase of this study, factors were assessed in adolescence as antecedents of disconnection in emerging adulthood. Life course theory posits that development is lifelong and that no life stage can be understood in isolation from others. Furthermore, youth experiences in adolescence may provide turning points that deflect behavioral trajectories into and through adulthood (Johnson et al., 2011). This is critical as the current service delivery system for disconnected youth often focuses on one developmental period (or age group) without considering the life course implications of disconnection (Mendelson et al., 2018). Life course theory also stresses the importance of linked lives, which is central to the ecology of human development. This principle reveals that human lives are lived interdependently and that social and historical influences are expressed through this network of shared relationships (Elder, 1996, 1998; Elder et al., 2003). This principle extends beyond interdependence to the interlocking trajectories of individuals and their sequence of transitions. Interlocking trajectories are
especially prominent in the transition to adulthood (Elder, 1996). The concept of linked lives was demonstrated through African American youth desire and need for meaningful relationships with parents, peers, and school personnel as they transition to adulthood.

The social development model highlights socialization as a fundamental component and theorizes that individuals with whom youth interact across the contexts of their lives exert a powerful developmental influence (Catalano & Hawkins, 1996). Thus for African American youth, interactions within the family context and peer group serve likely to exert greater influences on behavior well into adulthood. When these socializing processes are consistent, a social bond of attachment and commitment develops between the individual and the socializing unit. Once established, the social bond inhibits behaviors inconsistent with the beliefs held and behaviors practiced by the socialization unit through establishment of an individual’s stake in conforming to the norms, values, and behaviors of the socializing unit to which he or she is bonded. The more strongly an individual is bonded to a socializing unit, the more likely he or she is to adopt its beliefs and values. This commitment, in turn, influences future behavior. It is hypothesized that the behavior of the individual will be prosocial or antisocial depending on the predominant behaviors, norms, and values held by those individuals or institutions to whom the individual is bonded (Catalano & Hawkins, 1996; Choi et al., 2005; Fleming et al., 2002).

**Policy and Practice Implications**

The present study aimed to deepen understanding of risk and protective factors associated with youth disconnection distinct to the African American population. It replicated established findings as well as expanded on the literature related to the disconnected youth population, which have important implications for policy and practice efforts. For example, the passage of ESSA in 2015 recognized that students be taught to high academic standards that will prepare
them to succeed in college and careers. This expanded educational opportunity for marginalized youth and promoted accountability and positive change in low-performing schools (USDEa). Despite policy upgrades and paradigm shifts, these provisions do not automatically cross over to youth attending alternative education programs. School-based alternative education programs house the most academically disadvantaged youth, but lack a unified legislation at the federal level. Qualitative findings from the current study suggest the importance of engaging marginalized groups in schools, particularly at alternative school sites and the need for accountability to ensure quality education. Qualitative review of school policies would be an avenue for identifying policies that may be contributing to youth disconnection, either inadvertently or by design (Mendelson et al., 2018).

Furthermore, ESSA and Perkins V requires states to specify how schools will effectively transition students from high school to postsecondary education and the workforce (USDEc). Perkins V promotes career exploration, development activities, comprehensive guidance, and academic counseling for students. Qualitative and quantitative findings from the current study suggest the importance of incorporating parents in these transitional conversations and meetings. As this practice will further reinforce to youth the message that education and workforce are important to parents and, in turn, should be important to youth as well. Furthermore, incorporating youth voices in the process would enhance the ability of researchers and policy makers to view the issues from the perspective of young people who are at risk for disconnection (Mendelson et al., 2018).

The findings from the current study also suggest an integrative policy and intervention approach to address prevention efforts regarding youth disconnecting from education and employment. Literature highlights the necessity of integrating supportive responses that do not
treat education and employment as mutually exclusive program goals (Bridgeland & Milano, 2012). Enhancing the educational and employment success of marginalized groups is critical in the reduction of high family poverty rates, family disruption, and alienation (Lerman, 1999). Interventions should help support youth to create a more positive pathway to educational, career, and social outcomes. In addition, by actively supporting youth and providing access to educational and workforce training, key support staff such as counselors, career coaches, social workers, and psychologists can create a safety network to keep youth on a stable pathway to continued schooling and workforce participation into adulthood. Furthermore, establishment of partnerships in education can enable a better and novel problem solving platform to leverage opportunities for youth, especially those that are at high risk of disconnecting in emerging adulthood.

Beyond this, to be maximally effective, strategies to prevent disconnection need to be delivered at multiple ecological levels (i.e., family, peers, school, community), during various developmental stages (infancy through adulthood), and across various sectors (e.g., education, labor). To expand on the work already begun and address a problem as complex as youth disconnection, multisectoral approaches are needed. Strategies more likely to succeed will be those that use coordinated data systems, consolidate service delivery and blend funding, and involve young people in the design and implementation of interventions (GAO, 2017; Mendelson et al., 2018).

**Limitations**

This study has several limitations that should be noted. First, the mixed methods design utilized parallel samples which limited this researcher’s ability to make meta-inferences (i.e., both sets of inferences are combined into a coherent whole; Collins et al., 2007). The samples
selected for the qualitative and quantitative phases, however, generated adequate data pertaining to youth disconnection. More specifically, the qualitative sample allowed for thick, rich description that supports descriptive and interpretative transferability and the quantitative sample allowed for analytical generalizations specific to African American high school students. However, there remain qualitative differences between the samples that should be noted. The qualitative data were derived from high-risk, transition-aged youth attending one alternative high school in the deep South. Although youth were considered on a risk trajectory consistent with the experience of disconnected youth, the study participants were attending school and for the most part committed to it. The qualitative sampling strategy limits findings from being transferred to another context.

Second, this researcher relied on self-reported data. In the qualitative phase, due to the nature of self-reporting, there is not any assurance that the participants were giving truthful responses. However; to mitigate this risk, participants were assured that their responses would be kept confidential and that there were no right or wrong answers to the interview questions. In addition, the quantitative data were self-reported by students, parents, and school administrators increasing the risk of biased data due to social desirability. To reduce this type of responding, future research should encourage self-administration of questionnaires rather than completing telephone interviews, frame survey questions so that respondents know that any answer to the question will be viewed as acceptable, and in regards to school-level data, assess perceptions of other members of the school community (e.g., teachers and staff). Parent questionnaires were completed by the parent or guardian most familiar with the student’s school situation and experience. This individual was self-selected which may have introduced an undesirable source of variance for the parent-reported data.
Some of the challenges of broad-scale national surveys are a lack of control over administration and the collection of complete data. Thus, the percentage of missing data for this study was a concern. The accuracy of the standard errors and the ability to make inferences could therefore be challenged. To address this, multiple imputation was used to deal with missing data for select variables (e.g., variables with missing data up to 40%). Beyond this, missing data impacted the sample size at both levels and lowered statistical power and precision of results. Future research should address issues of missing data by use of more rigorous imputation procedures for missing values. This would increase statistical power and the validity of inferences. Moreover, future research regarding the disconnected youth population would benefit from datasets that are constructed to be more representative of youth at risk for disengagement and provide more statistical power for multilevel analyses. Such datasets might include analyses of early warning risk factors in middle school as a prediction of disconnected status in emerging adulthood, mental health factors, and a sufficient sample size at the student-level (e.g., at least 50) and the school-level (at least 50).

Third, this study runs the risk of omitted variable bias at the school-level. Similar to most studies, this researcher cannot guarantee that this study accounted for every school-level characteristic that can possibly predict youth disconnection. It is possible that this researcher left out some important variables that could risk over- or underestimation of the relationship between predictors and youth disconnection. A final limitation to be noted is that this study is based on nonexperimental data and causal interpretations of relationships should not be drawn.

**Future Directions for Research**

The findings from this study suggest that more research is needed to improve the conceptualization and understanding of disconnectedness. Future qualitative research could
apply a critical lens and utilize youth-based participatory action research, to explore what it means to young adults to be connected in emerging adulthood and to assess if disconnection is a result of systematic oppression based on race, gender, or disability. Incorporating other cultural perspectives to explore similarities and differences in perceptions by identities such as gender identity and race/ethnicity and how those perceptions impact young people would enable better targeting of policies and practices to support youth during this transition to adulthood. In addition, assessing the voices of youth with disabilities is an area for exploration. Disconnected youth are more than three times as likely to have a disability compared to connected youth. Despite laws requiring accommodations on the job and in schools, living with a disability remains a barrier to employment and education. Inaccessible transportation systems, workplaces, and schools, prejudice and discrimination, and inflexible schedules add extra barriers to employment and schooling for people with disabilities (Burd-Sharps & Lewis, 2018). This qualitative work could inform quantitative research in that it may help with the operationalization of disconnectedness, which is necessary to improve data collection and analysis for cross-sectional and longitudinal studies. Researchers should work to improve the precision of conceptualizing disconnectedness by identifying measures to account for young people receiving disability benefits, undereducated and underemployed youth, or young people who are supported by family resources.

Quantitative findings from this study revealed that more than a quarter of the national analytic sample of African American youth were disconnected (i.e., no school or work) 3 years out of high school. The prevalence rate for disconnection was much higher than the prevalence rate reported in previous literature using varying data sets (e.g., 7% to 20% depending on the ages of the youth, defining features, and methodology). This finding reinforces the need for a
more unified definition to studying youth disconnection. Many of the studies performed since the 1990s have relied on different iterations of the definition by adjusting for the period of time examined, age of youth, and other characteristics (e.g., Belfield et al., 2012; Besharov & Gardiner, 1999; Fernandes-Alcantara, 2015a; MaCurdy et al., 2006). The current study relied on the most commonly used definition of youth disconnection which included teenagers and young adults between the ages of 16 and 24, who were neither in school nor working (Belfield et al., 2012; Burd-Sharps & Lewis, 2017; Fernandes-Alcantara, 2015a; Treskon, 2016). Future work will hopefully produce a unified and comprehensive definition that results in greater precision in capturing this vulnerable population.

In addition, research should focus on expanding the dichotomy of youth disconnection and study it in terms of a developmental process. Disconnection has been seen as a status when youth are not employed and not involved in educational activities for extended periods (MaCurdy et al., 2006). This results in an either-or conceptualization rather than a process. In the future, research should focus on viewing disconnection on a continuum and potentially include descriptors of those youth who are said to be under attached, categorized by sporadic education and workforce attachments.

Further research is needed to consider other school-level variables in the prediction of youth disconnection. These variables should focus on the academic climate of the school and also student’s access to guidance counselors. Specifically, the number of counselors per school, average caseloads, and percent of hours counseling staff spend on career and job skill development versus other duties such as scheduling and academic testing. Additional school-level variables should include geographical region of schools, percentage of minority students, and percentage of students that have repeated a grade.
Findings from this study also lend into further research on exploring the impact of parental engagement in the prediction of disconnection in emerging adulthood for African American youth using structural equation modeling. This statistical technique would analyze the structural relationship between measured variables and latent constructs, providing insight to which aspect of parental engagement (e.g., parents’ physical presence in school activities and/or parent-child discussions about educational and workforce outcomes) is more relevant.
APPENDIX A. IRB APPROVAL

ACTION ON EXEMPTION APPROVAL REQUEST

TO: Danielle Eugene
    Social Work

FROM: Dennis Landin
      Chair, Institutional Review Board

DATE: April 30, 2019

RE: IRB# E11700


Review Date: 4/30/2019

Approved X Disapproved

Approval Date: 4/30/2019 Approval Expiration Date: 4/29/2022

Exemption Category/Paragraph: 4b

Signed Consent Waived?: N/A

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

By: Dennis Landin, Chairman

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING – Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU’s Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

* All investigators and support staff have access to copies of the Belmont Report, LSU’s Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb
APPENDIX B. DISCLOSURE RISK REVIEW

Disclosure Risk Review

<table>
<thead>
<tr>
<th>Received</th>
<th>Due</th>
<th>Returned</th>
<th>Title</th>
<th>Author(s)</th>
<th>Dataset(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/31/2020</td>
<td>2/5/2020</td>
<td></td>
<td>EUGENE DISSERTATION</td>
<td>Danielle Eugene</td>
<td>HSLS</td>
</tr>
</tbody>
</table>

X_ No necessary changes identified.

OR

__ Necessary changes identified. Please see below.

<table>
<thead>
<tr>
<th>Page</th>
<th>Para</th>
<th>Line</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX C. VARIABLES USED IN THE MODEL

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Description</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconnected Status</td>
<td>X4PSLFSTFB16</td>
<td>Postsecondary enrollment and labor force status</td>
<td>0 = No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Yes</td>
</tr>
<tr>
<td><strong>Student-Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>X1SEX</td>
<td>Student’s gender</td>
<td>1 = Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Female</td>
</tr>
<tr>
<td>Family Socioeconomic Status</td>
<td>X1SES</td>
<td>Scale of socioeconomic status</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1.93-2.88</td>
</tr>
<tr>
<td>Family Structure</td>
<td>X1PARPATTERN</td>
<td>Family structure</td>
<td>1 = Two-parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Single/No parent</td>
</tr>
<tr>
<td>Repeat Grade</td>
<td>P1REPEATGRD</td>
<td>9th grader has repeated a grade</td>
<td>0 = No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Yes</td>
</tr>
<tr>
<td>Suspended/Expelled</td>
<td>P1SUSPEND</td>
<td>9th grader has ever been suspended or expelled</td>
<td>0 = No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Yes</td>
</tr>
<tr>
<td>Student Educational Expectations</td>
<td>X1STUEDEXPCT</td>
<td>How far in school 9th grader thinks he/she will get</td>
<td>1 = Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = High</td>
</tr>
<tr>
<td>School Engagement</td>
<td>X1SCHOOLENG</td>
<td>Scale of student’s school engagement</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-3.38-1.39</td>
</tr>
<tr>
<td>Parental Engagement</td>
<td>MTOTPARENTENG</td>
<td>Parental engagement composite</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.77-17.36</td>
</tr>
<tr>
<td>Peer Affiliation</td>
<td>MTOTPEERS</td>
<td>Peer affiliation composite</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.63-8.00</td>
</tr>
<tr>
<td><strong>School-Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Size</td>
<td>A1CAPACITY</td>
<td>Percent capacity to which school is filled</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20-150</td>
</tr>
<tr>
<td>School Type</td>
<td>A1SCHTYPE</td>
<td>School type (traditional)</td>
<td>0 = No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Yes</td>
</tr>
</tbody>
</table>

(table cont’d)
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Variable Description</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Climate</td>
<td>X1SCHOOLCLI</td>
<td>Scale of administrator’s assessment of school climate</td>
<td>Continuous -4.22-1.97</td>
</tr>
<tr>
<td>Mean School SES</td>
<td>MSES</td>
<td>Average school socioeconomic status</td>
<td>Continuous -1.01-1.51</td>
</tr>
<tr>
<td>Mean School Belongingness</td>
<td>MSCHBEL</td>
<td>Average sense of school belongingness</td>
<td>Continuous -7.43-0.79</td>
</tr>
</tbody>
</table>
REFERENCES


135


VITA

Danielle R. Eugene, a native of Patterson, Louisiana received a Bachelor of Science degree in Psychology from the University of Louisiana at Lafayette in 2007. Thereafter, she pursued and earned a Master of Social Work (MSW) degree from Louisiana State University (LSU) in 2009. After completing her MSW, Danielle practiced for 7 years in child welfare, adult mental health, and school social work. In addition, she received her Licensed Clinical Social Worker certification in the states of Louisiana and Texas. In 2016, she returned to LSU for her doctoral studies. She anticipates graduating May 2020 with a Doctor of Philosophy in Social Work.