The Influences of Roles and Support Systems on the Baccalaureate Degree Attainment of Nontraditional Learners

2017

Shirdricka Roberts

University of Central Florida

Find similar works at: https://stars.library.ucf.edu/etd

University of Central Florida Libraries http://library.ucf.edu

Part of the Educational Leadership Commons

STARS Citation


This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
THE INFLUENCES OF ROLES AND SUPPORT SYSTEMS ON THE 
BACCALAUREATE DEGREE ATTAINMENT OF 
NONTRADITIONAL LEARNERS

by

SHIRDRICKA LEEANN ROBERTS 
B.A. University of Central Florida, 2010 
MPA University of Central Florida, 2012

A dissertation submitted in partial fulfillment of the requirements 
for the degree of Doctor of Education 
in the Department of Child, Family and Community Sciences 
in the College of Education and Human Performance 
at the University of Central Florida 
Orlando, Florida

Spring Term 
2017

Major Professor: Thomas D. Cox
ABSTRACT

The purpose of the research study was to examine the influences of roles and support systems on the baccalaureate attainment of nontraditional learners. A qualitative bounded case study was conducted that include ten face-to-face interviews with nontraditional learners attending the same University during the same time period. The study provided a brief overview on the challenges, support systems, and motivations of these nontraditional learners. Theories used to frame the study’s conceptual framework and address its research questions included Biddle’s (1979) Role Theory, McClusky’s Theory of Margin, Load and Power (1971) and Tinto’s (1975, 1993, 2012) and Bean and Metzner’s (1985) Theory of Persistence.

The results of the study indicated: 1) The role management that adult learners employed while being a full-time or part-time student. 2) The challenges that adult learners had to address as it relates to their multiple roles and degree attainment. 3) The support systems that adult learners used to assist them in their efforts to role manage and persist towards graduation. 4) The motivations behind an adult learner’s pursuit of an undergraduate degree.
Dedicated to my Lord and Savior, Jesus Christ; my father, Frederick Lee Roberts;
my mother, Shirley Ann Roberts; and my sister, Shirtrina Niquita Roberts.
Without you, your love, your patience and your faith... this would not be possible.

I love you.
# TABLE OF CONTENTS

LIST OF FIGURES ............................................................................................................ x

LIST OF TABLES ............................................................................................................. xi

CHAPTER ONE: INTRODUCTION .................................................................................. 1

- General Background ................................................................................................. 1
- Statement of the Problem ......................................................................................... 1
- Significance of the Study .......................................................................................... 2
- Research Questions .................................................................................................... 3
- Methodology ............................................................................................................... 3
- Conceptual Framework ............................................................................................... 4
  - Role Theory .............................................................................................................. 5
  - Persistence Theory .................................................................................................. 6
  - Theory of Margin, Power and Load ........................................................................ 7
- Concluding Statement ............................................................................................... 8
- Definitions of Terms ................................................................................................. 8

CHAPTER TWO: LITERATURE REVIEW ..................................................................... 11

- Introduction ............................................................................................................... 11
- Role Theory ............................................................................................................... 12
- McClusky’s Theory of Margin, Power and Load ..................................................... 14
- Persistence Theory ................................................................................................... 17
Data Collection Procedures........................................................................................... 44
Interview Process........................................................................................................ 45
Data Analysis.............................................................................................................. 46
Data Management....................................................................................................... 50
Conclusion.................................................................................................................. 52

CHAPTER FOUR: RESULTS ......................................................................................... 53

Introduction................................................................................................................ 53
Participants............................................................................................................... 53
Themes and Findings from the Research Questions..................................................... 57
Overarching Themes.................................................................................................. 57
Findings from Research Question 1............................................................................ 58
Role Conflict/Overload.............................................................................................. 61
Time Management..................................................................................................... 62
Private Matters......................................................................................................... 64
Support Systems....................................................................................................... 66
Coping Mechanism................................................................................................... 68
Financial Benefits..................................................................................................... 69
Conclusion to Research Question One ..................................................................... 71

Findings from Research Question 2............................................................................ 73
Support Systems Subthemes..................................................................................... 76
Institutional Support.................................................................................................. 77
LIST OF FIGURES

Figure 1: Conceptual Framework ....................................................................................... 5

Figure 2: McClusky’s Theory of Margin, Power and Load Study Illustration.............. 15

Figure 3: Criteria Description used in Respondent Categorization ................................. 44

Figure 4: Process to Data Analysis and Reporting ........................................................... 51

Figure 5: Respondents’ Age Categories ........................................................................... 54

Figure 6: McClusky’s Theory of Margin, Power and Load Participant Illustration........ 72
LIST OF TABLES

Table 1: Alignment of Research Questions to the Conceptual Framework ....................... 8
Table 2: Question Matrix .................................................................................................. 41
Table 3: Final Overarching Themes ................................................................................. 49
Table 4: Research Questions and Overarching Themes ................................................... 50
Table 5: Participant Characteristics .................................................................................. 56
Table 6: Thematic Chart for Research Question One ....................................................... 59
Table 7: Thematic Chart for Research Question Two ...................................................... 74
Table 8: Assertion Matrix ................................................................................................. 90
CHAPTER ONE: INTRODUCTION

General Background

According to the National Center for Education Statistics (NCES) Digest of Education Statistics (2014), over 5.4 million adult learners are pursuing a baccalaureate degree from an institution of higher education. These numbers are anticipated to continue to increase. The NCES Condition of Education Report, 2016 concluded that, “the total undergraduate enrollment in degree-granting postsecondary institutions increased 31 percent . . . By 2025, total undergraduate enrollment is projected to increase to 19.8 million students” (Kena et al., 2016, p. 100). Attrition for nontraditional learners is greater than traditional college-age learners. For example, “64% of 18-year-old students enrolled in 2003-2004 graduated within 6 years compared to 20% of those aged 24 to 29 years, and 16% of those aged 30 and older” (Markle, 2015; NCES, 2011a).

Statement of the Problem

There is an increase in the number of adult learners entering or returning to college to pursue a baccalaureate degree. To date, adult learners represent over half the total enrollment of part-time students, and more than 33% of the nation’s total enrollment in higher education (Bergman, Gross, Berry & Shuck, 2014, p. 90). With these growing numbers, educational administrators and policymakers could “look at the various factors and attributes of this population of students and what institutions need to do in order to serve their unique needs” (Wood-Wyatt, 2008, p. 20).

This dissertation was completed in fall 2016 and published in spring 2017.
The success of America’s institutions of higher education is heavily contingent upon its ability to retain students. According to Fincher (2010), “student retention is a critical factor in the success or failure of any university in achieving its mission” (p. 12). In order to assist educational institutions in addressing this problem and achieving its mission, the study explored the growing number of nontraditional learners who are pursuing a baccalaureate degree since their attrition is greater than traditional students.

Significance of the Study

“The adult-education market will be the fastest-growing one in higher education for the foreseeable future” (Vacarr, 2014, p. 1). According to the National Center for Education Statistics (2002), adult learners (when compared to traditional students) are most likely to leave their learning institution without completing an undergraduate degree. Reasons for this attrition abound. Some have attributed this phenomenon to the lack of support services available to nontraditional learners (Brown, 2002; Johnson, 1991; Sandler, 1998). Still others (Trueman & Hartley, 1996; Dill & Henley, 1998; Morris & May, 2003; Hermon & Davis, 2004; Hoyert & O’Dell, 2009) compare the roles and responsibilities of traditional and nontraditional learners. For example, unlike traditional students (age 18 to 22), nontraditional adult learners potentially have multiple roles, including but not limited to: being an employee, caregiver, spouse, parent, veteran, friend, sibling, child, community member and student. Consequently, as adult learners struggle to meet the demands of their roles, they no longer have the time needed to engage in the support services that are available on college campuses. Without support,
many nontraditional learners experience challenges including role overload and role conflict (Biddle 1979; McClusky, 1971; Guastella, 2009; Westring & Ryan, 2010). Understanding how to help nontraditional learners work around some of these obstacles encountered during degree attainment has challenged researchers, policymakers, and higher education institutions to conduct studies to understand the plight of nontraditional learners. The significance and purpose of this study includes understanding how roles and support systems influence baccalaureate degree attainment among nontraditional learners. The researcher chose to select participants who majored in STEM to serve as an example populous and not as a basis to analyze the study’s purpose.

Research Questions

The following research questions for this study are as follows:

RQ 1: How does managing multiple roles as adult learners influence baccalaureate degree attainment?

RQ 2: How do support systems influence the attainment of a baccalaureate degree attainment among adult learners?

Methodology

The methodology for this study is a bounded case study (Yin, 2003; Creswell, 2013). The case study includes ten nontraditional learners who are bounded by attending the same University, in two colleges, during the same period of time, fall 2016. Data for the study included findings from face-to-face interviews. These interviews were recorded
and transcribed and then coded and analyzed for relevant themes. The participants were chosen using the following criteria: 1) Class standing- undergraduates only 2) Degree program-undergraduates pursuing degree in science, technology, engineering or mathematics. 3) Horn’s classification of nontraditional students undergraduates who were classified as moderately (two or three roles) or highly nontraditional (four or more roles) learners. 4) Age- nontraditional undergraduate students between the ages of 25 and 50.

**Conceptual Framework**

The following theories comprise the conceptual framework that guided this study, including Role Theory as defined by Biddle (1979), McClusky’s Theory of Margin, Power and Load (1971), and Persistence Theory (Tinto, 1975, 1993, 2012; Bean & Metzner, 1985). The center of influence within the conceptual framework is McClusky’s (1971) Theory of Margin, Power, and Load. Persistence towards academic success is fostered as support systems are employed. Increases in the perceptions of power (supports; persistence) among nontraditional learners leads to decreases of load (challenges). The Theory of Margin, Power and Load are embedded in Tinto (1975, 1993, 2012), Bean and Metzner’s (1985) persistence theory towards degree attainment. Role theory envelops the other theories within the conceptual framework as the role of nontraditional learners varies.
Role Theory
According to Biddle (1979), role theory involves, “human beings behaving in ways that are different and predictable depending on their respective social identities and situations” (p. 68). For example, a nontraditional learner is expected to engage in multiple roles. These roles may include, but are not limited to, the following: a spouse, parent, community volunteer, employee, or mentor. Each one of these roles represents a different situation with a set of expectations in which the nontraditional student takes on a social identity to meet. As time progresses, the student’s involvement within their multiple identities and situations can lead to role conflict (Fowlkes, 1987; Hall, 1972; Mikolaj & Boggs, 1991). Role conflict refers to an individual’s involvement in a role that causes him or her to be, “unavailable to perform responsibilities and demands in another role”
Within this study, role theory was used to examine the experience of nontraditional learners in their efforts to role manage.

Persistence Theory

Persistence theory in higher education provides a way to explain how learners persevere towards their academic success and goals. Persistence is often employed when a nontraditional learner considers changing their enrollment status from full-time to part-time due to role load, temporarily stopping (unenrolled for one or more semesters) due to role demands, or withdrawing from school due to social or familial demands. Many factors contribute to persistence by adult learners including the faculty, student support services, self-motivation, community, family, and friends. Persistence among nontraditional learners includes their intrinsic motivation. The greater the intrinsic motivation, the greater effort is extended towards persistence.

Within this study, Tinto’s (1975, 1993, 2012), Bean, and Metzner’s (1985) Theory of Persistence was used to examine the research findings. Bean and Metzner (1985) purported that nontraditional learners persist more in higher education due to external (outside of the university) factors rather than being involved with internal (inside the university) factors. Key factors related to student persistence included study habits and utilizing advising, academic background (including previous academic performances), goals, and demographics. Likewise, factors such as work, family, and finances either supported or negated nontraditional learners’ persistence; however, Bean
and Metzner recognized that nontraditional learners are less influenced by socialization than their traditional counterparts.

Theory of Margin, Power and Load

In his Theory of Margin, Power and Load, McClusky (1971) stated that learning in adulthood occurs when there is a functional margin between an individual’s power level and their degree of load. Power, in this case, refers to the resources, abilities, and/or possessions that are available to assist the individual in managing or “going beyond” what is required to manage their load. Conversely, load refers to the demands associated with the individual’s area(s) of commitment and societal expectations.

According to McClusky (1971), each individual has the authority to reduce or increase his or her load and power. Through this, an adult learner will be able to make the appropriate adjustments needed to support his or her academic, professional and personal endeavors. Within this study, McClusky’s Theory of Margin, Power and Load examined whether an adult learner’s level of power (support systems) has an influence on their ability to manage their load (multiple and often conflicting roles) and graduate with a baccalaureate degree.
Table 1: Alignment of Research Questions to the Conceptual Framework

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Theories</th>
</tr>
</thead>
</table>
| RQ 1: How does managing multiple roles as adult learners influence baccalaureate degree attainment? | • Role Theory (Biddle, 1979)  
• Theory of Margin, Power and Load (McClusky, 1971) |
| RQ 2: How do support systems influence the attainment of a baccalaureate degree attainment among adult learners? | • Theory of Margin, Power and Load (McClusky, 1971)  
• Persistence Theory (Bean & Metzner, 1985; Tinto, 1975, 1993, 2012) |

Concluding Statement

The rest of the document is organized in this manner: Chapter 2 contextualizes the study in light of the known literature. Chapter 3 provides the description of the study design including research methodology and methods. Chapter 4 contains the research findings by question. Finally, Chapter 5 summarizes the findings in light of the literature and includes the limitations of the study and future research suggestions.

Definitions of Terms

The following are definitions of the study’s key terms:

Adult learner: An individual who is at the age of 25 or older and has at least one of the following ‘nontraditional’ characteristics (roles): delayed enrollment; part-time enrollment; full-time employment; financial independence; a dependent other than a spouse; the only parent of a dependent; a high school dropout who did not earn a high
school diploma (National Center for Education Statistics, 2002). The term adult learner and nontraditional learner are used interchangeably.

Degree and/or educational attainment: “The level of education completed (i.e., a high school diploma or equivalency certificate, a bachelor's degree, or a master's degree)” (Kena et al., 2016, p. 36).

Nontraditional Learner: An individual who is at the age of 25 or older and has at least one of the following ‘nontraditional’ characteristics: delayed enrollment; part-time enrollment; full-time employment; financial independence; a dependent other than a spouse; the only parent of a dependent; a high school dropout who did not earn a high school diploma. A nontraditional student is also referred to as an adult learner (National Center for Education Statistics, 2002). The term adult learner and nontraditional learner are used interchangeably.

Persistence: The desire and action of a student to stay within the system of higher education from beginning year through degree completion (Berger & Lyon, 2005).

Retention: The ability of an institution to retain a student from admission to the university through graduation (Berger & Lyon, 2005).

Roles: The characteristics of an adult learner. These characteristics include, but are not limited, to the individuals fulfilling the responsibilities associated with the roles of an employee, veteran, caregiver, spouse, parent or student.
Role conflict: A type an intrapersonal conflict. Some scholars suggest that, “role involvement causes an individual to be unavailable to perform responsibilities and demands in another role” (Wyland, Lester, Mone & Winkel, 2013, p. 349).

Role management: The adult learner’s ability to manage their roles.

Traditional student: One who earns a high school diploma, enrolls full-time in higher education immediately after finishing high school, depends on parents for financial support, and either does not work during the school year or works part-time (National Center for Education Statistics, 2002).
CHAPTER TWO: LITERATURE REVIEW

Introduction

The purpose of this qualitative study is to explore nontraditional learners’ experiences in persisting towards baccalaureate degree attainment to better understand the experiences of these learners in terms of role management and support systems. In chapter two, a literature review provides the reader with an overview of the previous research related to the study’s conceptual framework. Further, current statistics of adult learners and degree attainment, the methodology, and other related constructs (barriers, motivations, and supports) pertinent to the study are included.

A conceptual framework is a collection of theories and concepts that support a research study (Robson, 2011). The current study builds on the work and existing conceptual framework of Guastella (2009) by expanding to include specific theorists. The conceptual framework that guides the study includes the works of Role theory (Biddle, 1979) and McClusky’s Theory of Margin, Power and Load (1971). These theories are connected together by Tinto’s (1975, 1993, 2012) and Bean and Metzner’s persistence theory (See Figure 1). Finally, Levinson’s theory of Adult Development was considered in choosing participants for the study as to represent many types of adult learners. Throughout this study, the terms conceptual model and framework are used interchangeably (Robson, 2011; Parahoo, 2006) and represent the diagram indicated in Figure 1.
Role Theory

Role theory has been researched in many fields, including, but not limited to: a) leadership; b) psychology; c) nursing; d) anthropology; e) education (Guastella, 2009) and f) sociology. Role theory encompasses people, their behaviors, and their contexts. According to role theory, people’s actions and behaviors are a result of their societal perceptions or inferences of the norms for their roles (Biddle, 1979). Role theory relates to one’s identity (how one views oneself) within society (Fowlkes, 1987). The concepts of roles within role theory are multi-faceted and viewed through various perspectives.

Roles may be related to contextual activities and events and assumed based on one’s context. As an example, consider Kammy; at the community center, she is the Pilates instructor and assumes the role of an educator. At home, Kammy is a partner who has the role of primary breadwinner and nurturer. At school, she is a junior who is a student in an Organic Chemistry class. Further, Kammy is the treasurer for the solar energy club. Within each of these contexts (functional, situational, cultural), Kammy assumes a different position and acts according to the expectations of the context (Biddle, 1979).

Not only do roles change within contexts, but they also shift and morph throughout adulthood. Most adult learners are involved in multiple contexts and thereby have multiple roles. Some studies have identified a link between multiple roles and personal satisfaction and physical and emotional wellness (Vandewater, Ostrove, & Stewart, 1997; Johnson & Robson, 1999); however, other studies indicate that multiple roles can lead to increased stress, which in turn may impact one’s physical and emotional...
wellness (Thoits, 1983; 1987). When considering the impact of adult learners’ multiple roles, Carney-Crompton and Tau (2002) indicated that conflicts and strain caused by multiple roles impacted their academic experience.

Within role theory, there are several perspectives, including role conflict, role strain, and coping strategies. Role conflict occurs when an individual operates in a position that requires him or her to perform two or more roles that are unrelated, contradictory, and mutually exclusive. Employment and school may be settings that cause role conflict, which can negatively contribute to degree attainment.

Role conflict is a type of intrapersonal conflict. Some scholars suggest that, “role involvement causes an individual to be unavailable to perform responsibilities and demands in another role” (Wyland, Lester, Mone & Winkel, 2013, p. 349). When an adult learner experiences intrapersonal conflict, he or she is torn between two different directions. While in this state, the adult learner may choose a direction that results in either a positive or negative outcome. Intrapersonal conflict is not a situation that occurs once in an adult learner’s lifetime; it occurs on numerous occasions throughout the day.

Role strain is a feeling of being unable to complete role related expectations due to role conflict. For instance, an adult learner with the roles of an employee and a student may experience role strain when an unexpected work meeting is called that would conflict with an evening class. Gigliotti and Huff (1995) identified common role strains for nontraditional learners such as inadequate academic ability or skills, lack of time, and non-supportive environments. Chronic persistence of these role strains can be the
foundation for future stress. Westring and Ryan (2010) reported that both personal and institutional support systems can lower strain and stress. Sustained stressors from role conflicts and strain have been identified as a contributor to student attrition (Henson, 2014).

**McClusky’s Theory of Margin, Power and Load**

In 1963, McClusky presented his theory of margin, power and load. According to his theory, adulthood is a time of growth, change and integration, in which one is constantly struggling to balance their amount of needed and available energy. McClusky identified this battle as a ratio between an individual’s load (L) of life, which dissipates the amount of energy that is available, and the power (P) of life, which provides the individual with the ability to deal with the load. The margin in life is the ratio of load to power. For example, the more power an individual has, the greater the margin he or she has towards participating in learning (see Figure 2).
According to Merriam, Caffarella and Baumgartner (2007), external load relates to an individual’s family, work, or community involvement, while internal load is composed of an individual’s desires, aspirations, and future expectations. Power consists of the external resources available to an individual to assist them in balancing their external and internal loads. These resources include: family support, educational support, programs and services, and social and financial abilities. In addition, power can also...
include the internal acquired or developed skills and experiences that will assist the individual in achieving balance through coping, resilience, and personality.

According to McClusky (1971), the theory of margin, power, and load operates when there is a marginal increase caused by a reduced load or increased power. At the same time, increasing the load or reducing the power available to the individual can also operate the theory of margin, power, and load. When this occurs, the margin decreases. In situations where the individual’s load matches or exceeds the available power and both are fixed, out of control, and/or irreversible, the individual will become extremely vulnerable and susceptible to breakdown. If, however, load and power can be controlled or if an individual is able to lay hold of a reserve (Margin) of power, he or she is better equipped to meet unforeseen emergencies, take risks, engage in exploratory creative activities, and, most importantly, is more likely to learn (Merriam, Caffarella & Baumgartner, 2007).

When applying the theory of margin, power, and load to adult learners, these individuals should be able to manage their multiple roles and the time demands associated with these roles. By maintaining some margin of power, the adult learner will have the time needed to learn. Just as the theory of margin, power and load is applicable to the learning environment, it is also applicable to the developmental stages of adulthood.

Merriam, Caffarella and Baumgartner (2007) noted that the changes adults experience in their developmental stages is a result of the adjustments made in load and
power. When these adjustments occur, the person accumulates, and later relinquishes, their adult responsibilities to modify the varying roles in their developmental stage. Furthermore, changes in roles and responsibilities, as well as development (both physical and mental) are often the cause of adult learning. Therefore, McClusky’s theory can be used to understand the link between learning and changing social roles of adulthood (Merriam, Caffarella & Baumgartner, 2007, p. 94).

Using the theory of margin, power, and load in their quantitative study of women adult learners (N=129), Mikolaj and Boggs (1991) developed a framework to determine the level of intrapersonal conflict that can occur in the lives of women adult learners. McClusky’s theory of margin, power, and load examined how women would view or develop sources of power (support services or coping mechanisms) to assist them with their role load (roles of a mother, spouse, student, and caregiver). The results of the study indicated a need for balance between a student’s load and power.

Persistence Theory

Persistence is commonly defined as steadfastly continuing a course of action regardless of the circumstances. Persistence theories were initially developed in higher education literature as a way to explain traditional learners’ experience of persisting towards degree attainment and retention in higher education (Bean & Metzner, 1985; Astin, 1985; Tinto, 1975; 1993; 2012).

Bean and Metzner (1985) purported that nontraditional learners persist more in higher education due to external (outside of the university) rather than internal factors.
Key factors related to student persistence discussed by Bean and Metzner include: study habits, utilizing advising, academic background (including previous academic performances), goals, and demographics. Likewise, factors such as work, family, and finances either supported or negated nontraditional learners’ persistence.

Astin (1985) indicated that social engagement with faculty and peers as well as academic involvement contribute to traditional learners’ persistence. Students who are able to connect with the institution are more likely to retain and persist towards graduation because they have found a sense of belonging. Student persistence and retention are shaped both directly and indirectly by internal and external social forces (Tinto, 1975; 1993; 2012). Connecting at a professional or personal level with faculty members, educational administrators, support staff, and fellow peers within an institution has an impact on a student’s sense of belonging, connection, and membership in the social and academic communities of the institution.

Student Success

Student success is defined as an adult learner's level of engagement in educational activities to acquire the knowledge, skills, and competencies needed to persist towards degree attainment (Kuh, 2005; Pascarella & Terenzini, 2005; Venezia et.al. 2005). Student success can be attributed to personal persistence to engage in the academic experience and obtain institutional support. Institutions assist students with engagement in academic activities by ensuring that academic resources are accessible in a structured environment that is conducive to learning. According to Kuh (2005), however,
educational leaders and institutions are not solely responsible for the student’s ability to achieve academic success.

Students must fulfill their part by being self-motivated to devote an appropriate amount of time into their studies and campus activities, programs and services. If a service is not available during the time allotted to the nontraditional student, it is the student’s responsibility to inform the proper authorities of their need. Kuh (2005) indicated that it is vital for students to be able to connect with their institution and its members. If a student is unable to develop a positive relationship with his or her professors and peers or engage in the academic programs and services, the likelihood of withdrawing or receiving an academic dismissal from the institution increases.

At the same time, however, the institution should be proactive in cases in which the student is unable to state his or her concern. Through this, the institution will be able to secure the funding that is needed to provide activities, programs, and services to meet the needs of all students, which will lead to a high level of student engagement, retention, and persistence. In 2005, Kuh’s study of student success indicated that there is a correlation between a student’s level of academic success and their level of engagement in academic activities. For example, if a student devotes a significant amount of time and effort to their studies, tutoring services, supplemental instruction, and other academic activities, they are expected to yield an outcome that constitutes student success.

Tinto (1975, 1993, 2012) agreed with Kuh’s theory of success by stating the importance of students being socially involved within the institution and with its
members. Without social integration, students are expected to experience loneliness and a
disinterest to retain their enrollment at the institution. Consequently, Tinto (1975, 1993,
2012) suggests that students refrain from social isolation by residing on campus.

Institutions of higher education are concerned about the persistence and retention
of students pursuing a baccalaureate degree in the United States (Pascarella & Terenzini,
2005). Adult learners are especially of concern to higher educational institutions.
According to the U.S Department of Education (2013), nontraditional students make up
more than 50% of all part-time enrollment and 33% of the nation’s total enrollment.
Furthermore, adult learners persist at a lower rate than traditional students working
towards a degree (Justice & Dornan, 2001; Noel-Levitz, 2011; Soares, 2013).

Limited information is available on the impact of programs geared towards the
persistence and retention of adult learners. The majority of literature on persistence and
attrition focuses on traditional students (Pascarella & Terenzini, 2005; Braxton 2000;
and their persistence. She noted that gender differences related to inter-role conflicts and
persistence in degree attainment existed among nontraditional students.

More women than men expressed the desire to withdraw from school prior to
completing their education due to inter-role conflict, but in the end, these females
persisted towards graduation. Inter-role conflicts differed by gender in part due to societal
perceptions. For instance, in the past, perceptions of male roles included being an
example and provider. In contrast, women were traditionally perceived as nurturers and
caretakers. While gender roles have shifted in society (Lindsey, 2015; Inglehart & Norris 2003; Hayes, 2000; Spence & Hahn, 1997; Twenge, 1997; Glenn, Chang & Forcey, 1994), Markle’s study recognized that traditional attitudes and beliefs contribute to role strain and conflict.

Wlodkowski, Mauldin and Campbell’s (2002) mixed-mode study regarding student attrition among those who had withdrawn from school indicated that many influences contribute to persistence towards degree completion, including: a) time, b) money, c) quality of advising, d) quality of teaching and e) peer interaction. These adult learners stated that competing priorities and roles took away from the time required for school related demands.

Known Factors Affecting Persistence Among Nontraditional Learners

A variety of other factors can affect an adult learner’s persistence towards their attainment of a baccalaureate degree. According to Pascarella and Terenzini (2005), these factors are included in the variation of the student’s socio-economic status, parent’s educational background, age, race/ethnicity, marital status, gender, college characteristics, college readiness, standardized test scores, and more.

Economic factors influence the educational attainment of adult learners pursuing a baccalaureate degree from a four-year public institution. A student who comes from a low socio-economic background runs the risk of being unable to remain at their respective educational institution in comparison to students from a higher socio-economic background (Titus, 2006; Braxton, 2000; Adelman, 1999).
Race and ethnicity are correlated to educational attainment among nontraditional students (Pascarella & Terenzini, 2005). When compared to their fellow peers, African Americans and Hispanics are less likely to complete their baccalaureate degree. In fact, the first African American did not graduate from college until 1823 (Harper, Patton & Wooden, 2009; Hausmann, Schofield & Woods 2007). The type of institution that nontraditional learners attend to pursue a degree, whether two-year or four-year, are predominately white institutions (PWI).

Historically, black colleges and universities (HBCU) influence African Americans’ likelihood of degree attainment (Pascarella & Terenzini, 2005). Several studies indicate that African Americans are more likely to graduate with a baccalaureate degree if they attend an HBCU rather than a PWI (Ehrenberg & Rothstein, 1994; Pascarella & Terenzini, 2005, Rodgers & Summers, 2008). Reasons for persistence at an HBCU over a PWI may relate to the environment and a perceived student-oriented faculty (Pascarella & Terenzini, 2005, p. 394).

Two-year colleges have a smaller number of students enrolled; therefore, the faculty and/or staff members tend to know the students by name, and typically, the institution is in close proximity to the nontraditional learner’s home. Whereas, four-year institutions are typically not on a first name basis, the student body is large in number, and they are distanced further away from students’ homes, which ultimately impacts their ability to retain and persist (Harry, John & Keegan, 2013).
Gender also plays a role in degree attainment; however, researchers are not in agreement as to which gender persists more towards degree attainment. Some studies find that gender is an inconclusive variable (Arbona & Nora, 2007), others find that women are more likely to persist than men (Buchmann & DiPrete, 2006; Leppel, 2002), and still, others find that men persist over women in certain circumstances. Markle (2015) suggested that a student’s gender does not have a significant influence on his or her ability to persist towards graduation; however, there are differences in the factors that influence the persistence rates of men and women in postsecondary institutions. For instance, women have a tendency to be more influenced by their enrollment status, level of inter-role conflict, academic classification, and institutional satisfaction. On the other hand, men’s persistence rates tend to be more influenced by their age, financial status, and concerns. Nonetheless, if a student, irrespective of gender, is unable to address and overcome negative influences, he or she will struggle to meet their role expectations and persist towards graduation.

Support Systems

Support systems from both institutions and family affect a nontraditional learner’s likelihood to complete school. Specifically, the lack of support from family, peers, and a student’s respective institution will negatively influence degree attainment. Conversely, positive support undergirds learners towards degree attainment (Santiago, 2007; Pascarella & Terenzini, 2005; Hernandez, 2000).
Institutional Support

In order to facilitate an environment that is conducive to the learning and retention of adult learners, educational institutions have resources available on campus, such as coping strategies and programming, which can lessen the stressors that negatively influence nontraditional students (McClary, 1990; Giancola, Grawitch & Borchert, 2009). Educational institutions provide a myriad of resources to promote the academic, personal, and professional development of its student populace, including: career services, legal services, counseling and psychological services, supplemental instruction, tutoring, academic advising, Greek life, multicultural academic and support services, social justice and advocacy, transfer and transition services, and student accessibility and health services. Through these programs and services, adult learners are able to receive the information they need in order to persist towards degree attainment (Pascarella & Terenzini, 2005).

Social Support

Outside of institutional influence, adult learners are expected to identify possible sources of social support from one or more of the following: family, friends, peers, employers, coworkers, or a significant other. Support from one or more of the aforementioned sources could equip the adult learner with the emotional, financial, physical, or personal support needed to encourage them to persist towards their baccalaureate degree attainment. Following the initial identification of support, it is
recommended that adult learners also identify the sources that could hinder their ability to manage their roles and persist towards graduation (Kasworm, Polson & Fishback, 2002).

Financial Benefits

According to survey results from Flint and Frey (2003), the majority of adult learners are concerned about their financial status. In fact, research conducted by Ryder, Bowman, and Newman (1994) indicated that the most arduous barrier to the educational attainment of adult learners is financial hardship. Consequently, the persistence rates of adult learners are heavily impacted by their institution's tuition and fees (Hippensteel, St. John & Starkey, 1996).

One way to address this challenge is through the support and distribution of adult-focused programs, scholarships, loans, and employee tuition programs. One of those programs is a childcare program for students to enroll their children in without cost so that they can take advantage of evening classes, participate in academic support services and complete homework assignments on campus (Hatfield, 2003). Scholarships are another resource for nontraditional learners. Unlike student loans, an advantage of scholarships is that they do not require the recipient to repay the amount received. Through scholarships, adult learners are able to receive additional financial support needed to finance their education, address personal needs, and reduce debt (Hatfield, 2003).

Outside of scholarships, adult learners also have the support of subsidized and unsubsidized loans. Fortunately, through loans, adult learners are able to receive some of
the same financial benefits that are offered through scholarships. A final source of financial benefits include employee tuition programs (Hatfield, 2003). Through these types of program, adult learners receive financial support from their employer, and therefore, may able to enroll in one to two courses per semester. Workplace funding varies; the funding may cover the full cost of tuition, partial tuition assistance, or tuition reimbursement.

Coping Mechanisms

In the midst of role conflict, an adult learner is expected to experience some levels of stress (Gigliotti & Huff, 1995). For the purpose of this study, stress is defined as the consequence of an adult learner’s efforts to manage multiple conflicting roles. If not handled appropriately, stress can hinder an adult learner’s ability to role manage and persist towards degree attainment. For instance, if an adult learner returned to college to complete his baccalaureate degree, his roles as a parent or spouse would be in competition with his new student role. The adult learner would then have to choose which role would take priority in regards to their investment of time, energy, and finances. Coping mechanisms (defined in the study as family support, peer support, spousal support, and employer support) are then developed to address the other areas within the roles that lack the adult learner’s time, energy, and financial investment (Giancola, Grawitch & Borchert, 2009).

Sandler (2002) examined the role of stress on adult learners’ persistence. The results of the study indicate that stress is a key variable in regards to adult learners’ grade
point average, persistence, and commitment. In addition, the study further validates the reason behind adult learners’ developing coping mechanisms and accessing support systems to relieve the stress they are experiencing. According to a recent study conducted by Westring and Ryan (2010), undergraduate students who receive social support from their parents are less likely to experience multiple role stress, psychological distress, and life dissatisfaction when compared to their peers who do not have parental support.

Research has identified that one way to alleviate stress among adult learners is to implement support systems within higher education institutions (Carney-Crompton & Tan, 2002; Rifenbary, 1995). These systems can be provided through the establishment of assigned advisors and faculty mentors. In addition, workshops and training seminars should be made available to adult learners, either online or in person. These programs can inform adult learners about how they can establish support systems amongst their family, friends, and work colleagues, and in turn, can assist in the retention of adult learners while negating role strain (Dyk, 1987; Chartrand, 1992; Giancola, Grawitch & Borchert, 2009).

**Conceptual Framework**

The study’s conceptual framework illustrates how role theory (Biddle, 1979), McClusky’s theory of margin, power and load (1971), and Tinto’s (1975, 1993, 2012) and Bean and Metzner’s (1985) persistence theory were used concurrently to examine whether an adult learner’s ability to manage their roles influences their ability attain a
baccalaureate degree. The conceptual framework was also used to determine whether support systems influence an adult learner’s ability to attain a baccalaureate degree.

As an adult learner journeys through his or her developmental stages, the number of roles that he or she is involved in will increase, decrease, morph, and change. These roles may include: a spouse, parent, student, employee, caregiver, volunteer, pet owner, and veteran. In an effort to manage respective roles, the adult learner’s responsibilities of one role will often come in conflict with the responsibilities of another simultaneously occupied role. When this occurs, the adult learner will begin to experience role strain or role overload. Consequently, role theory was used to examine how the conflicting roles of adult learners can influence their ability to role manage. From there, Tinto’s (1975, 1993, 2012) and Bean and Metzner’s (1985) persistence theory was used to examine whether an adult learner's ability to role manage has an influence on his or her ability to persist towards degree attainment.

Following the results of the aforementioned examination, McClusky’s theory of margin, power, and load was used to examine whether an adult learner’s level of power (support systems) has an influence of his or her ability to manage load (multiple and often conflicting roles). The study concluded with Tinto’s (1975, 1993, 2012) and Bean and Metzner’s (1985) persistence theory examining whether an adult learner's level of power (support systems) has an influence on his or her ability to persist towards degree attainment (See Figure 1).
Adult Learners

In institutions of higher education, adult learners (also known as nontraditional students) have become the new majority population according to the National Center for Education Statistics (NCES). According to Kasworm (2003), over the past thirty years, nontraditional students have increased dramatically in both absolute number and in the percentage of the student population in relation to traditional students (24 years of age and under).

Approximately one third of the nation’s undergraduate population were classified as adult learners, age 25 and over (Markle, 2015). These numbers will continue to increase, as the number of undergraduate students remains progressive. In 2011, NCES published data on the increasing enrollment of adult learners aged 25 to 34 and 35 and older in postsecondary institutions. When compared to the enrollment of traditional students aged 18 to 24, adult learners were enrolling at a rapid pace. For example, from the year 2008 to 2019, the percentage of enrolled traditional students is expected to increase by 12%, while the enrollment of adult learners is expected to increase by 50% (NCES, 2011b).

Levinson’s Adult Development Theory

In order to have a broad representation of adult learners at all stages of life, Levinson’s adult development stages were used to categorize participants in varying stages of adult development. In his book, *Seasons of a Man’s life*, Levinson (1978) described the life cycle of a man as periods of transition and stability as one journeys
through the age-linked eras of early and late adulthood. Levinson (1978) purported that these periods last approximately five to seven years. For example, a man will go through a period of “building and maintaining” his life structure before entering a period of “transition”, in which he will terminate the existing structure and move towards a new one that will fully emerge in the ensuing structure building maintaining period (p. 6).

Levinson’s (1978) concept of life cycle involves more than just one’s life course. Metaphorically, the seasons of a year represent the stages of a life cycle. For example, the spring represents the individual growing and blossoming in their youth. The summer represents the season in which the individual experiences the greatest passion and ripeness (Levinson, 1978). In order for change to occur within each season, there is a period of transition that shifts the individual from one season to the next. Therefore, despite the uniqueness of an individual’s life, everyone ventures through the same basic sequence of a life cycle. During these periods of development, an individual may be impacted by societal and personal changes.

Each period in Levinson’s human life cycle begins and ends with a specific age; however, a variation of two years above and below the average is expected (see Figure 2). Within this study, participants belonged to the following life stages:

- Entry Life Structure for Early Adulthood (ages 22 to 28): Tasks involve making key choices (especially regarding love/marriage/family, occupation, separation from family of origin, and lifestyle) and organizing one’s life as a young adult.
The first life structure built in an era is necessarily provisional; it is an initial attempt to make a place for oneself in a new world and a new generation.

- **Age 30 Transition (ages 28 to 33):** This stage occurs in mid-era. It provides an opportunity to reappraise the Entry Life Structure, do some further work on individuation (including undone work of earlier transitions), and explore new possibilities in which the next structure can be formed. It is a time of moderate to severe developmental difficulty for most women and men.

- **Culminating Life Structure for Early Adulthood (ages 33 to 40):** The primary developmental task during this stage is to form a structure in which one can establish a more secure place for him or herself in society and accomplish his or her youthful dreams and goals. During this stage, an individual moves from “junior” to “senior” membership in the adult world.

- **Mid-life Transition (ages 40 to 45):** This stage provides a developmental bridge between early and middle adulthood and is part of both eras. In this stage, individuals terminate the life structure of the thirties, come to terms with the end of “youth” as it existed in early adulthood, and try to create a new way of being young-and-old, appropriate to middle adulthood.

- **Entry Life Structure for Middle Adulthood (ages 45 to 50):** The primary task of this period is to create an initial structure for the launching of middle adulthood. This period is often dramatically different from that of the late thirties. Even when it is superficially similar (for example, one is in the same job, marriage,
community, etc.), there are important differences in the relationships that form the central components of the life structure; individuals establish an initial place in a new generation and a new season of life.

Levinson’s adult developmental stages was one metric used for participant selection. Participants were chosen to represent a range of stages expressed above. Another classifier used was the continuum of moderate to highly non-traditional learners; selected participants ranged on this continuum. According to the National Center for Education Statistics (2002), a student is nontraditional if he or she has any one of the following characteristics: a) delayed enrollment; b) part-time enrollment; c) full-time employment; d) financial independence; e) has a dependent other than a spouse; f) is a single parent; g) does not have a high school diploma. On the contrary, Horn (1996) stated that a student is nontraditional based on a continuum of the number of characteristics that he or she possesses. For example, “students are considered to be ‘minimally nontraditional’ if they have only one nontraditional characteristic, ‘moderately nontraditional’ if they have two or three, and ‘highly nontraditional’ if they have four or more” (NCES, 2002, p. 3).

Barriers for Adult Learners Pursuing a Baccalaureate Degree

Reasons abound as to why nontraditional learners do not reach degree completion. Taniguchi & Kaufman’s (2005) investigation of historical data determined that part-time enrollment was an indicator that an adult learner may not finish his or her education to degree completion. In relationship to age and adult developmental level, however, those
who were relatively young, those in Levinson’s entry life structure for early adulthood (22-28) and age 30 transition (29-33) stages, were more likely to complete their baccalaureate degree. Other contributing factors to college success included being in a managerial occupation (both men and women) and possessing a higher cognitive ability. Marital status had no bearing on degree attainment, but being a parent of young children did correlate to not completing one’s education. Finally, persistence (meaning re-enrolling after previously dropping out) was considered a key factor among those who earned a degree.

Adult learners often face challenges that influence their success towards academic pursuits. According to Mercer (1993), there are three challenges that influence the academic success (in this case, persistence) of adult learners. These barriers include: a) situational barriers that arise from an individual’s particular situation or environment at any given point, relating to the adult learner’s family, job and civic commitment b) dispositional barriers (intrapersonal issues) involving dissonance among the adult learner’s role demands, and c) institutional barriers, which are systemic issues that occur within educational institutions and negatively impact the adult learner’s ability to pursue his or her education.

Situational barriers occur among adult learners when their responsibilities related to parenting, work, or civic engagement negatively impact their ability to persist towards graduation. For example, adult learners who are parents often feel guilty about their inability to spend quality time with their children. Carney-Crompton and Tan (2002)
stated that adult learners with older children tend to persist more towards graduation than those with younger children. Another example includes the financial state of the adult learner. Finances play a significant role in the student’s ability to complete their academic goals (Barr & McClellan, 2011; Engle & Tinto, 2008; Pascarella & Terenzini, 2005). For instance, low-income families spend the vast majority of their time meeting the basic needs of their family.

Dispositional barriers involve the way learners see themselves in education. For instance, a learner might think, “I am not good at tests; therefore, I am not going to do well in this class because we only take tests.” This lack of self-confidence impacts one’s ability to successfully perform in an academic setting. In addition, adult advisees may bring memories of past educational endeavors that haunt them in their current efforts to succeed in higher education. Frequently, these experiences have eroded their self-confidence. They may be embarrassed by their previous performance and anxious about their ability to do college work. Some may express a fear of failure compounded by the fact that they may feel “too old to learn.” Dispositional barriers seldom disappear quickly, and advisors must be alert to how these barriers can contribute to the stress experienced throughout one’s college career (Kasworm, Polson & Fishback, 2002).

Institutional barriers for nontraditional learners include institutionalized practices and procedures that prevent learning or cause difficulty for the nontraditional learner. The majority of institutions of higher education do not accommodate the needs of adult learners (Benshoff and Lewis, 1992). For example, institutions may offer office and class
hours that are inconvenient for adult learners who have full-time jobs or are primary caregivers for an elderly or disabled family member, which creates access problems and may be an institutional barrier. In addition, adult learners may have more difficulties being a part of social and academic events that are readily available to their traditional student counterparts. Theses inequities within an institution may create institutional barriers to the academic success of adult learners. Conversely, Fairchild (2003) indicated that adult learners continue to persist towards degree attainment despite the barriers within an institutional system. Kasworm, Polson, and Fishback (2002) indicated that some institutions have begun to recognize the needs of adult learners by providing programs geared towards part-time students; establishing urban or regional campuses; creating adult credit programs, such as evening schools; or implementing supportive environments and support systems for adults.

**Motivation for Degree Attainment**

Adult learners’ intrinsic and extrinsic motivation contribute to degree attainment. For some, recapturing past aspirations of completing college becomes an impetus for pursuing an education as a nontraditional student (Babineau & Packard, 2006). The increasing number of adult learners seeking a baccalaureate degree may be linked to societal values of degree attainment, financial gain, or personal satisfaction. According to Kasworm, Polson, and Fishback (2002), adult learners’ motivations for enrolling in college is a combination of personal transitions and proactive life planning. For example, some adult learners have always desired a baccalaureate degree; however, at the time of
their decision to attend college, they had a child or children who were dependent on
them. Consequently, they had to put their dreams on hold until their children entered
grade school or a stage of financial, social, or academic independence. Other adult
learners were motivated to start or complete their undergraduate degree when their
employment position ended or when they did not receive a promotion based on their level
of educational attainment (Knox, 1977).

Qualitative Case Study Approach

Based on previous work related to nontraditional learners, roles, and degree
attainment (Guastella, 2009), qualitative research methods are appropriate for evaluating
roles based on developmental level among adult learners. One approach within
qualitative research is the case study, which has been used within social sciences to
explain complicated issues within context. Case studies are an outcome of inquiry as well
as a means to inquire (Stake, 2000). A case study can involve multiple people who share
defining characteristics (Yin, 2003), or it can involve an organization, program, or entity.

Yin (2003) indicated that case studies are appropriate when the following
conditions are met: the study seeks to answer how and why questions, the behavior
within the phenomenon cannot be manipulated, and there is relevancy of the context to
the phenomenon. While Yin (1994) and Gillham (2000) noted that multiple data sources
in the development of a case study strengthen the evidence explaining the phenomenon,
findings reported from a qualitative study are not meant to be generalizable.
Conclusion of Literature

The purpose of this literature review was to provide a brief overview of adult learner characteristics, their barriers to academic success, the support systems used to address these barriers, and the motivating factors that encouraged persistence towards degree attainment. Furthermore, the literature included studies on: 1) role theory (Biddle, 1979) and how an adult learner’s roles can conflict with one another and influence his or her ability to role manage and attain a baccalaureate degree, 2) McClusky’s theory of margin, power, and load (1971) and its insights on how the adult learner’s level of power influences his or her ability to role manage and attain a baccalaureate degree, 3) Tinto’s (1975, 1993, 2012) and Bean and Metzner’s (1985) persistence theory and how it can influence an adult learner's ability to role manage and persist towards degree attainment, and 4) Levinson’s Theory of Adult Development (1978).

This literature review shaped and explained the conceptual framework and methodology for the current study. Chapter 3 details the methodology and research approach of the study. A descriptive study was used, seeking to understand the phenomenon of adult developmental stages and their influences on roles and degree attainment. It is a bounded case of adult learners at UAL in the Colleges of Science and Engineering.
CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this research study was to qualitatively investigate how adult learners manage multiple roles and how support systems influence degree attainment while working towards a baccalaureate degree at a four-year public institution. Chapter 3 documents detailed steps as to how this qualitative study was conducted. A rationale is provided for the purposeful sampling of participants through critical case analysis (Patton, 1990, 2015). Finally, the timeline, data collection and data analysis procedures, and research design are indicated in chapter 3.

Research Design and Rationale

Qualitative Design: Case Study

The examination of adult learners’ quest towards degree attainment is a complex and multifaceted issue. A qualitative study was designed to examine the perspectives of adult learners regarding their multiple roles and the support systems available to them while pursuing degree attainment. Qualitative research varies quite differently from quantitative research in the sense that the former is concerned with the process of research rather than the outcome or product. Qualitative researchers are generally concerned with understanding the behavior of their study’s participants from their own frame of reference (Hoepfl, 1997). Qualitative research guides researchers in gaining in depth perspectives on what is known or on information that may be difficult to convey.
quantitatively. Thus, qualitative methods are appropriate in situations where one needs to first identify the quantitative, testable variables, or when the researcher has determined that quantitative measures cannot adequately describe or interpret a situation. In addition, qualitative research and interview questions are often open-ended, supporting exploration and discovery of new and valid information (Hoepfl, 1997).

Qualitative methodologies are appropriate to employ when the participants’ perspectives and understandings are the focus for exploring a problem or phenomenon (Creswell, 2013). When conducting qualitative research, researchers often use interviews as their primary method to collect data. Patton (1990, 2015) discussed three categories of qualitative interviews: informal, conversational interviews; semi-structured interviews; and standardized, open-ended interviews. In a semi-structured interview, the interviewer has the ability to probe and explore the areas relating to their research inquiries in a flexible way. In this study, the researcher collected data using a semi-structured interview protocol that included ten open-ended questions.

Design strategies of qualitative research observed in this study include naturalistic inquiry and purposeful sampling. The first strategy, naturalistic inquiry, described how qualitative research takes place in a “natural” setting in which the researcher is the key instrument of the study (Creswell, 2013; Patton 2002, 2015). The role of the researcher during his or her time in the natural setting is to gain access to the prospective participants of the study (Schatzman and Strauss, 1973). The second strategy, purposeful sampling, occurs when participants in a case are chosen because of their varying
perspectives. In this study, a range of developmental ages, gender, enrollment status, ethnicities, and familial formations were chosen to present a broad range of viewpoints related to multiple roles and support systems.

Within qualitative research is case study research. According to Stake (2005), the case study is what is being studied in a bounded system. In the present study, the case includes nontraditional adult learners bounded by a place during a certain time period. Creswell (2013) defines case study research as a methodology within qualitative research. The single case being studied in this research are the interviewees who share the experience of attending the same university during the same period of time. The assertions (Stake, 2005) indicated in chapter 5 are not generalizable but do indicate what the researcher learned.

**Research Questions**

The research questions that guided this study were:

1. How does managing multiple roles influence adult learners’ ability to attain a baccalaureate degree?
2. How do support systems affect adult learners’ attainment of a baccalaureate degree?

In order to answer the research questions, data collected included: demographic information, survey data, interview data, contextual information, and field notes. Demographic information was collected through a survey administered through Qualtrics as a means to identify interview participants prior to face-to-face interviews (See
APPENDIX C). Interview data was collected through audio recording and subsequent transcribed interviews. Contextual information was collected, and the researcher recorded field notes. Finally, data collected from the interviews were matched to the research questions (See Table 2) and the theorist noted in the conceptual framework (See Figure 1).

Table 2: Question Matrix

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>X</td>
</tr>
<tr>
<td>Question 2</td>
<td>X</td>
</tr>
<tr>
<td>Question 3</td>
<td>X</td>
</tr>
<tr>
<td>Question 4</td>
<td>X</td>
</tr>
<tr>
<td>Question 5</td>
<td>X</td>
</tr>
<tr>
<td>Question 6</td>
<td>X</td>
</tr>
<tr>
<td>Question 7</td>
<td>X</td>
</tr>
<tr>
<td>Question 8</td>
<td>X</td>
</tr>
<tr>
<td>Question 9</td>
<td>X</td>
</tr>
<tr>
<td>Question 10</td>
<td>X</td>
</tr>
</tbody>
</table>
The Case Study

The researcher determined the bounded case (Creswell, 2013) to include nontraditional learners enrolled in either the UAL’s College of Engineering and Computer Science or College of Sciences (a convenience population). The nontraditional learners were in attendance at the university during 2016. A case study methodology is appropriate to use when the researcher desires to investigate a real-life, contemporary bounded system (a case) over time through a detailed, in-depth collection of multi-source information (e.g., observations, interviews, documents or reports) and report case description and themes (Creswell, 2013). Furthermore, a case study is a common methodology used by researchers in the fields of education, psychology, sociology, business, nursing, anthropology, political science, and social work to contribute to current knowledge of individual, group, organizational, social, and political related phenomena (Yin, 2009).

Research Sample

Participants who completed face-to-face interviews were selected through purposeful sampling (Creswell, 2013) from those who completed the initial quantitative questionnaire. The following criteria was met to ensure that a range of participants were included in the face-to-face interviews to provide robust data of varying viewpoints: 1) Levinson’s Stage of Adult Development was utilized as a means to capture the multiple perspectives of nontraditional learners. 2) Class standing determined whether a student was an undergraduate student. 3) The adult learners’ majors were considered in keeping
with the convenience sampling earning a degree from UAL’s COS and CECS. Finally, 4) Horn’s classification of nontraditional students was used to determine if a student was moderately (two or three roles) or highly nontraditional (four or more roles).

Respondents who were not between the ages of 25 and 50 were removed. Following the initial categorization by age, prospective participants were grouped by their major field. Respondents who did not major in a STEM field were removed. Next, the prospective participant's status as moderately or highly nontraditional were reviewed under each degree field (science, technology, and engineering). Respondents who were not an undergraduate student or moderately/highly nontraditional were removed. Afterwards, the remaining respondents in each major were placed in a group based on their gender (male and female).

At the conclusion, critical case sampling (Suri, 2011; Turner, 2010; Guetterman, 2015) aided in the identification of participants who had specific experiences related to the study’s purpose. Critical case sampling is a type of strategy involving the selection of cases that will yield the most pertinent information and contribution to knowledge development (Patton, 1990, 2015). Selected prospective participants were then invited to participate in face-to-face interviews. The first ten to confirm their willingness to be interviewed were chosen to participate in the study.
Figure 3: Criteria Description used in Respondent Categorization

Data Collection Procedures

Based on previous studies (Creswell, 2013; Jacob & Furgerson, 2012; Kvale & Brinkmann, 2008), an interview protocol was created by the researcher for the face-to-face interviews. UAL’s Institutional Review Board (IRB) approval was sought. Upon approval of the IRB, the researcher sent a formal request to the Institution’s Knowledge Management (IKM) department requesting the first and last name and email address of UAL’s CECS and COS adult learner population (age 25 and above). IKM provided a list that included the names of 1,586 adult learners, of which 336 students identified as female and 1,250 identified as male. Upon recipient of the contact information, the researcher sent an email to the 1,586 adult learners from the list provided by IKM. The formal invitation via email invited the sample population to complete a brief questionnaire through Qualtrics, an online survey consisting of ten demographic questions (see APPENDIX C). In the initial invitation, a release form, the study’s
purpose, the role of the researcher, the role of the respondent, confidentiality, time commitment, and a description of a potential monetary incentive ($20) were provided (see APPENDIX E).

After the surveys were distributed, 71 prospective participants completed the questionnaire. All participants who completed the questionnaire were then validated for further participation if they met the following criteria: 1) Undergraduate student, 2) Declared STEM major, 3) Moderately or highly nontraditional students. Through the categorization process, the researcher employed critical case sampling (Patton, 2015). Next, the researcher sent a formal invitation via email to 15 respondents (five from each major field of study represented: science, technology and engineering). The first ten respondents were scheduled for face-to-face interviews. The remaining five invitations were not considered for the study due to: non-response, response time, or scheduling conflict.

Interview Process

Next, interviews took place in a room located in the College of Engineering and Computer Science, a setting familiar to the interviewees. At the beginning of each interview, the interviewee was provided with a copy of the release form reviewing their rights and data protection protocols. Then, participants’ assent was obtained. All participants indicated their assent to participate in the study. Upon completing the aforementioned steps, the researcher began the semi-structured interview (Kvale & Brinkmann, 2008; Galletta, 2013; Leavy, 2014).
The researcher stated each question in the same order at every interview for consistency purposes. In order to ensure the accurate account of data, the researcher used an audio recording device (Hoepfl, 1997). The audio recordings of the interviews were only accessible to the principal investigator and used for educational purposes. There were no abnormalities observed during the interview process. Each interview was conducted in the same manner. All participants who made an appearance for the interview completed the interview.

At the conclusion of the interview, the researcher expressed her gratitude for the participants’ involvement in the study. The researcher also reminded the participants that they are more than welcome to contact her if they have any questions or concerns about their interview. The face-to-face interviews lasted an average of 31.8 minutes. The longest interview lasted 38 minutes and the shortest lasted 16 minutes. Interviews were conducted over a one-week period.

**Data Analysis**

Upon completion of all interviews, the researcher transcribed the audiotapes into transcripts using Sonocent, an online audio note taking software. Once all transcriptions were complete, the researcher printed a copy of each transcription and read the participants’ responses from beginning to end. Corbin and Strauss (2008) wrote that it is vital for the researcher to read the materials they have collected from beginning to end—once it has been transcribed.
After completing the initial reading of the transcriptions, the researcher conducted another round of reviews to gain familiarity with participant responses. During this time, the researcher did not highlight the text or initiate the coding process. Next, the researcher used Dedoose, an online qualitative software, to initially review the transcriptions for commonalities. The researcher used inductive thematic analysis to identify 196 codes that represented the words, phrases, and/or sentences within the transcriptions that related to the study’s purpose and research questions (See APPENDIX F and G). The master code list (consisting of the 196 codes) was the basis for the remaining coding processes identified by these levels.

Level One: The researcher reviewed the master list of codes in an Excel Spreadsheet and placed the codes into separate categories. These codes were then mapped to the conceptual framework for the study. The researcher then assigned colors to each category to separate categorical lists of codes from one another. After color-coding, the researcher assigned a title to each list to later use to represent the identified themes. At the conclusion of this step, the researcher removed every code that did not fit within one of the categorical lists and provided a brief explanation of the removal in another tab on the spreadsheet.

Level Two: The researcher reviewed the transcriptions once more, in addition to the codes that represented words, phrases, and/or sentences within the document. If it was determined that the code adequately represented its content, the researcher wrote a “Yes” in the description column; however, if the researcher needed to reassign, recode, or
remove the code, the researcher provided a brief description of that decision and documented it within the Excel spreadsheet. Following this procedure, the researcher reviewed the titles assigned to each categorical list to determine if the title should remain, be reassigned under another categorical list of codes, or be removed. As done in level one, the researcher placed the title corrections and removed codes from the categorical list of codes into another tab on the spreadsheet.

Level 3: The researcher repeated the same procedures in level two coding analysis. The codes assigned to the statements within the transcriptions were reviewed to determine if they should remain within that section. If a code remained, the researcher wrote a “Yes” in the description; however, if the code needed reassignment or removal, the researcher provided a brief description regarding that decision. Following this procedure, the researcher reviewed the titles assigned to the categorical list of codes to identify the following initial themes: challenges, support systems, coping mechanisms, financial benefits, motivation, and institutional influence. The researcher edited the title corrections, removed the inapplicable codes from the categorical list of codes, and placed them into another tab on the spreadsheet.

Themes identified from the data included researcher, participant, and previous literature generated (Merriam, 2001, 2007). While there was initial mapping of the codes to the conceptual framework, a final review of the codes that led to the identification of themes was conducted. From there, the researcher compared the six identified themes narrowed down into three overarching categorical themes: challenges, support systems,
and motivation. Table 3 below provides an illustration of the three overarching themes and their descriptions.

Table 3: Final Overarching Themes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Themes Description</td>
<td>Roles/Role Overload</td>
<td>Institutional Influence</td>
<td>Better Opportunities</td>
</tr>
<tr>
<td></td>
<td>Time Management &amp; Flexibility</td>
<td>Coping Mechanisms</td>
<td>Make A Difference</td>
</tr>
<tr>
<td></td>
<td>Private Matters</td>
<td>Financial Benefits</td>
<td>Lifetime Goals</td>
</tr>
</tbody>
</table>

Next, the researcher evaluated the overarching themes, the research questions, and the conceptual framework for interrelationship. Other data comparisons were conducted using NVIVO for word frequency. The top twenty words are reflected in the overall themes indicated from the collected transcriptions (see Table 4). To develop codes and themes, a word cloud was created to provide a visual of the relative strength and frequency of some captured words.
Table 4: Research Questions and Overarching Themes

<table>
<thead>
<tr>
<th>RQ 1: How does managing multiple roles influence adult learners’ ability to attain a baccalaureate degree?</th>
<th>RQ 2: Do support systems affect adult learners’ attainment of a baccalaureate degree?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Challenges</td>
<td>Challenges</td>
</tr>
<tr>
<td>• Support Systems</td>
<td>• Support System</td>
</tr>
<tr>
<td></td>
<td>• Motivations</td>
</tr>
</tbody>
</table>

**Data Management**

Data was categorized by the research questions and elements of the conceptual framework (see Figure 4). All data was stored on university secured computer storage. During the constant comparisons of the data for identifying, coding, reviewing and revising, and developing themes and patterns, the researcher remained open-minded to allow the data to tell the story and prevent preconceived ideas and hypotheses from causing bias (Stake, 1995, 2010). All data was managed according to the IRB protocol. Subsequent data analysis files created through both online and university owned qualitative analysis software provided a chain of custody of the data and subsequent data reliability.
Delimitations of the study included participants from the COS and CECS who were moderately to highly nontraditional. A limitation of the data and methodology was the timing; interviews were short in duration (Taylor, Bogdan & DeVault, 2015; Anderson, 2010) and were conducted during a one-week period. Further, the questions were not consistently probed to provide depth of understanding of the multiple roles and support systems. Interviewees did not review the transcriptions for accuracy, and codes and themes were not cross checked by another researcher for validity purposes (Bloomberg & Volpe, 2012).
Chapter 3 summarized how the study was conducted, including the selection process of interviewees. A bounded case study was selected to document the experience of adult learners in relationship to the management of multiple roles and their perceptions of their support systems while attaining a baccalaureate degree. Further, a detailed timeline and data management were indicated in chapter 3. All software used to manage the data were recorded in this chapter. Chapter 4 provides evidence in relationship to the research questions of the 10 people who were interviewed.
CHAPTER FOUR: RESULTS

Introduction

Key findings of this qualitative study, organized by research question, are provided in chapter 4. Discussion of these findings are referenced in accordance with the conceptual framework. Codes, themes, and interview data and the procedures for determining and attaining dates are also indicated in this chapter. The study’s purpose was to explore learners’ perceptions of managing multiple roles while attaining a baccalaureate degree and to explore support systems and their contributions towards degree attainment. The results of the study indicated the following: 1) The roles and ways that adult learners managed the roles while being a full-time or part-time student. 2) The challenges that adult learners had to address as it related to their multiple roles and degree attainment. 3) The support systems that adult learners used to assist them in their efforts to role manage and persist towards graduation. 4) The motivations behind an adult learner’s pursuit of an undergraduate degree.

Participants

Of the 1,535 adult learners in the UAL’s College of Engineering and Computer Science (CECS) and College of Sciences (COS), seventy-two completed the demographic survey used for interviewee selection, which was a 4% return rate. The breakdown of majors represented by respondents who completed the survey include: 65%
engineering or computer science, 25% sciences, 6% technology, and 4% “other”, which included statistics and a double major in civil and environmental engineering.

Over half of respondents (65%) stated that they were enrolled as a full-time student. The remaining 35% indicated part-time enrollment. Since the study evaluated multiple roles, the respondents indicated whether they were a primary caregiver of an elderly or disabled relative as a student. Nine percent acknowledged they were the primary caregiver of an elderly or disabled relative.

In order to ascertain the developmental stage of the respondents, each prospective participant provided their age range (see Figure 5).

![Figure 5: Respondents’ Age Categories](image)
The majority of respondents were in the 22-28 age range, which corresponds to Levinson’s early adulthood stage. There was only one respondent in the middle adulthood stage. As the age of respondents increased, the number of respondents decreased. After analyzing the respondents’ survey answers, the researcher employed critical case sampling to choose participants from the respondents to invite for a face-to-face interview.

The researcher chose 15 of the 72 respondents to participate in the study’s in-depth interviews. Invitations were sent to those selected, and 10 of these invitations were accepted. The demographics for the interviewees are depicted in Table 5. The ages of those interviewed ranged from 25 to 49, with an average age of 33.6. Six of the study’s interviewees were male and four were female. The ethnicity and culture identification is: one African American, one Middle-Eastern (Pakistani), two White, two Asian, three Hispanic, and one multiracial. Finally, five were married, three were married with children, two were married and were a primary caregiver for a relative or spouse, one was unmarried and a primary caregiver for a relative, four were single and never married, and five were single or dating with children. In regards to employment, nine of the participants stated that they had to work in addition to being a college student. Only one participant stated that they did not work as a student in college. Half of the participants were enrolled full time, while the other half were enrolled part-time. All participants were provided an identification letter(s) in the deidentification process. They were referred to by their participant identification letter throughout the study.
Table 5: Participant Characteristics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Race*</th>
<th>Marital Status</th>
<th>Work</th>
<th>Full/Part-time Time Attendance</th>
<th>Caregiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>27</td>
<td>M</td>
<td>H</td>
<td>S</td>
<td>Y</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>49</td>
<td>M</td>
<td>AA</td>
<td>S</td>
<td>Y</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>30</td>
<td>M</td>
<td>A</td>
<td>S</td>
<td>Y</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>30</td>
<td>M</td>
<td>H</td>
<td>M</td>
<td>Y</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>34</td>
<td>F</td>
<td>W</td>
<td>M</td>
<td>Y</td>
<td>PT</td>
<td>PC</td>
</tr>
<tr>
<td>R</td>
<td>25</td>
<td>F</td>
<td>W</td>
<td>S</td>
<td>Y</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>41</td>
<td>M</td>
<td>A</td>
<td>S</td>
<td>Y</td>
<td>FT</td>
<td>PC</td>
</tr>
<tr>
<td>ST</td>
<td>35</td>
<td>F</td>
<td>H</td>
<td>M</td>
<td>Y</td>
<td>PT</td>
<td>C</td>
</tr>
<tr>
<td>J</td>
<td>31</td>
<td>M</td>
<td>MR</td>
<td>M</td>
<td>Y</td>
<td>PT</td>
<td>C, PC</td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td>F</td>
<td>I</td>
<td>M</td>
<td>N</td>
<td>PT</td>
<td>C</td>
</tr>
</tbody>
</table>

Note: *M=Male; F=Female; S=Single; MA=Married; H=Hispanic; AA=African American; I=Indian; W=White; A=Asian; and MR=Multiracial. C=Children, PC=Primary Caregiver
Themes and Findings from the Research Questions

Overarching Themes

Three overarching themes emerged from the interview data, including challenges, support systems, and motivations. Each of these themes related to the conceptual framework. Challenges and support systems are themes related to research question 1, while the support systems and motivations are related to question 2. Theories from the conceptual framework are evidenced in both questions.

Challenges represented the obstacles that adult learners had to face in their efforts to manage their roles and graduate with a baccalaureate degree. The following are examples of the challenges that the participants experienced: scheduling conflicts, class difficulty, lack of communication, health issues, travel time, negative experiences, and emotional distress. For some participants, challenges were time consuming and a hindrance on their ability to attend to their personal needs, studies, roles, and responsibilities, which resulted in their decision to sacrifice time spent with their family, resign from their place of employment, or extend their graduation by taking semesters off or becoming a part-time student. Fortunately, the participants were extremely motivated and had support systems in place to encourage their persistence towards degree attainment.

Support systems entities (individual and corporate), personal coping mechanisms, and other methods were used by adult learners to address their challenges. These support systems assisted students with the attainment of a baccalaureate degree and
included: family units, peer groups, friendships, technology aids, and academic services. Outside of these systems, participants stated that they often received support from employers who gave them the opportunity to flex their work schedules or work from home. Other participants stated that they primarily supported themselves by being motivated by their goals to complete a degree or to make a difference in the world.

Motivations represented in research question 2 include how students were inspired to manage their roles, retain their majors, and persist towards degree attainment. Participants stated that they were motivated by the encouragement they received from their family members, guidance counselors, advisors, and friends; their faith in God; their determination to meet goals; their desire to make a difference in the world; and their desire to make a better life for themselves and their loved ones. Without these streams of motivation, many participants would have been discouraged or discontinued their pursuit of a baccalaureate degree. Lussier and Achua (2004), defined motivation as an internal desire to meet a need. In the context of the study, motivations are not solely intrinsic; they can be incentivized, and therefore, can be extrinsic as well (Deckers, 2005).

Findings from Research Question 1

Research Question One: How does managing multiple roles as adult learners influence baccalaureate degree attainment? Table 6 provides a visual representation of the data analyzed for research question one. Interviewee data that were the basis of theme development are indicated by participants’ identification letter. The keywords are those that were frequently used during the interviews and are provided in the table to
indicate strength of theme (Yin, 2015; Grbich, 2007). The theories from the conceptual framework as they are related to the themes are included to indicate relationship to the conceptual framework.

Table 6: Thematic Chart for Research Question One

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
<th>Keywords that contributed to the theme</th>
<th>Theme Description one sentence</th>
<th>Interviewees that describe the phenomenon</th>
<th>Conceptual Framework Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
<td>Role Overload</td>
<td>Roles; work, classes, conflict, stress, overwhelmed, responsibilities</td>
<td>Role Overload represented when the demands of the participants’ role responsibilities during their time as an UAL undergraduate student. Role Conflict represented the conflict that occurred when the student efforts to meet the demands of two mutually exclusive roles at the same time.</td>
<td>A, C, E, R, S, W, J, N, ST, D</td>
<td>Role Theory Biddle, 1979</td>
</tr>
<tr>
<td></td>
<td>Role Conflict</td>
<td></td>
<td>aining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges</td>
<td>Time Management</td>
<td>Time, late, Schedule, Priority, Manage, Planning, Multitasking</td>
<td>Time Management represented the student’s challenges to manage time due to role overload and conflict.</td>
<td>A, E, W, R, S, ST, N, D</td>
<td>Role Theory Biddle, 1979</td>
</tr>
<tr>
<td>Theme</td>
<td>Subthemes</td>
<td>Keywords that contributed to the theme</td>
<td>Theme Description one sentence</td>
<td>Interviewees that describe the phenomenon</td>
<td>Conceptual Framework Relationship</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------</td>
<td>----------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Challenges</td>
<td>Private Matters</td>
<td>Personal, Crying, frustration, anxiety, worry, need, death, life</td>
<td>Private matters represented the student’s personal challenges (e.g. family death, stress) that negatively influence their ability to fulfill their roles and manage it.</td>
<td>R, A, W, J, N, ST, E, D</td>
<td>Role Theory Biddle, 1979</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Institutional Influence</td>
<td>University; support, help, hard, tutoring, professor, psychological</td>
<td>Institutional influence represented UAL’s faculty, staff, and student support programs and services.</td>
<td>R, A, S, W, J, C, ST, E, D</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Coping Mechanism/ Social Support</td>
<td>Family, friends, peer, spouse, employer, feel</td>
<td>Coping Mechanisms represented the different types of social support (e.g. family encouragement) that the student’s received to assist them in role management.</td>
<td>R, A, S, W, N, ST, E, D</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
</tr>
</tbody>
</table>
The challenges that the respondents faced varied as did their multiple roles; however, each respondent noted challenges in all sub themes. While some recognized the challenges themselves, others framed the challenges from the solution and strategies they put in place to work through them.

Role Conflict/Overload

Role overload was identified by analyzing the first two questions from the interview: 1) Describe the roles you managed during your time as a student. (For example, were you married, a parent, and/or an employee while simultaneously being a student?) 2) Share your experience in managing your roles as a student. Role overload was especially evident among participants who had high familial obligations. Participant C described her roles as an adult learner and demonstrated role overload. She stated, “Initially, I was a full time employee, a full-time student and a part-time caregiver for my parents. I got married halfway through my degree and at that point… I was part time employed and a full time caregiver to a 12-year-old little girl.”

In role theory, role overload occurs when an adult learner has insufficient time and energy to meet the demands of their multiple, mutually exclusive roles (Biddle, 2013; Rahim, 2011; Conley & Woosley, 2000). In an effort to address role overload, as exemplified by Participant C’s statement, an individual will oftentimes reduce their current role load or time allocated towards their conflicting roles (Matthew, Winkel & Wayne, 2013; Hall 1972).
Participant A, a 27-year-old, moderately nontraditional undergraduate student majoring in Information Technology, self-described the multiple roles he occupied as a UAL undergraduate student. According to Participant A, the roles he engaged in were manageable; however, his persona of being a workaholic caused him to take on more responsibilities than necessary to fulfill his role as an employee, which conflicted with his other roles and led to role overload, caused by his employer’s role expectation exceeding his ability to effectively and efficiently perform the tasks (Idris, 2011; Spector & Jex, 1998). He stated, “I am a workaholic. I work at least 50 to 60 hours a week…I was in a relationship…while being a part-time student.” As an employee, he recognized that being a workaholic contributed to his role overload of being in a relationship while maintaining part-time attendance at UAL.

Time Management

When answering interview questions number 2 and 3, the time management theme emerged. Question 2 asks: Share your experience in managing your roles as a student. Question 3 asks: How has your experience in role management made you feel? Time management was a strategy that the adult learners struggled to achieve due to their time-consuming, conflicting roles. Participant R commented, “I mostly learned a lot of time management because in the beginning it was very difficult for me to figure out…okay these hours I can work, these hours I can umm can study.”

When asked about his experience with time management, Participant A replied, “I feel like I don't have enough time. I feel like 20 hours is not enough and I need 20
because you got to sleep and I'm the type of person that you need eight hours of sleep and I am only getting four and it's bad…and I'm trying to get better at it.” These aforementioned statements indicated how important it was for adult learners to manage their time, which allowed them to also manage their conflicting roles while working towards degree attainment. Overall, being an effective time manager helped them become more successful.

As Participant A expressed in his interview, effective studying requires a significant amount of effort, time management, and sacrifice (Northedge, 1990; Race 1992). In 1996, Trueman and Hartley conducted a comparison study that examined the influence of time management skills on the academic performance of traditional and nontraditional students. The results of his study indicated that students’ ability to manage their time influenced their academic performance. When compared by gender, women strategically managed their time better than men.

Participant ST shared her thoughts on time management in relationship to her multiple roles:

It is very stressful it is very hard (laughing). And, I have to have time management down. If I do not plan wisely something is going to suffer on one end or the other. So I have my little notebook and I have each day. I don't do the electronic. I still like the old way. I write it down and I have to follow my schedule to stay on track or I will fall behind. So for example every day I have homework and if I skip say one day I'm screwed and I will fall behind in one of
my classes even if I'm so tired and I come home and I want to relax I really can't because I just all my classes are now upper level.

In this learner’s view, managing one’s time was a consequence of context (upper level classes) and trying to balance role demands. According to Pintrich (1999), a student’s effort to manage and control time contributes to his or her ability to adapt to a changing environment while meeting goals (degree attainment) and needs (role management).

Private Matters

Another sub theme under challenges is private matters. Private matters are often heartfelt occurrences or events that may not be readily shared with everyone. Interview questions number 2 and 3 were the basis for the theme of private matters. Question 2 asks: Share your experience in managing your roles as a student. Question 3 asks: How has your experience in role management made you feel?

According to Participant R, losing her grandmother, in addition to the stress of her roles as a student, influenced her ability to role manage: “…the first semester I got really stressed and was pretty much combusted along with personal issues such as my grandmother passing.” Dealing with the loss of his girlfriend, Participant A also experienced a loss in his ability to role manage. “I went through a breakup that happened six months ago and I took it pretty hard…I had to move to get a new house and so on. But having to manage that…I couldn't add anything else to school.” A loss of a loved one to death or a broken relationship are life stressors that influenced these nontraditional
learners. Other personal matters noted during the interviews included military deployment, personal sickness, and personal problems.

Participant D stated that he had encountered health issues that forced him to take on additional roles to support himself financially.

“Well…in that time I was struggling because I was uninsured but I was equally to stay in school motivated because I wanted to get ahead. There were so many things that I wanted to accomplish when I first jumped into those roles. It’s just that I did have some medical issues that was involved and that's where it became more frustrating because I was uninsured and the company that I worked for did not provide insurance so I had to buy indemnity insurance which made it increasingly difficult to tie up all those loose ends which meant more working hours.”

An analysis of the interviews recognized that the challenges theme is inextricably entwined with the solutions and strategies adult learners engaged in as they navigated the path towards degree attainment. The challenges and the subsequent strategies for addressing these challenges evidenced persistence. Other studies (Guastella, 2009; Thompson, Johnson-Jennings & Nitzarim, 2013) identified persistence as a key factor in degree attainment. The learners in this study evidenced persistence through their methods of time management, managing role conflict, and dealing with personal matters such as health and relationship loss. Within the next section of support systems, coping mechanisms are further explored.
Support Systems

The other theme represented in research question 1 is support systems. The subthemes include: institutional influence, coping mechanisms, and financial benefits. Within this theme, the influences of support systems were both positive and negative. Learners were able to manage multiple roles due to these support systems. Interview questions number 4 and 5 were analyzed in relationship to this theme. Question 4 asks: As a student, what support systems are or are not in place to assist you in managing your roles? Question 5 asks: Has your ability to manage your multiple roles improved or regressed with the support systems you have or have not received?

In the context of this study, institutional influence represented the UAL’s faculty, staff, and student support programs and services that impacted adult learners’ path towards degree attainment. Participants noted the following offices as resources they utilized at the UAL: Career Services, Student Accessibility Services (SAS), Student Academic Resource Centers (SARC), Veteran Academic Resource Center (VARC), Knights Pantry, and the CECS Office of Diversity and Inclusion (CECS ODI). Institutional influence was especially realized in the area of academic support.

At UAL, participants indicated the importance of having the support of faculty and academic services. Participant R, 25, shared her experience with UAL Student Academic Resource Center’s Supplemental Instruction (SARC SI). “At SARC SI, they go over everything in depth… if it wasn't for their assistance, I probably would of failed some of my courses because they are ridiculously hard.” Participant R’s classroom
performance, an important aspect of degree attainment, was influenced by institutional support.

Participant W mentioned that the UAL Veterans Academic Resource Center (VARC) and the Student Academic Resource Center (SARC) academic support services provided his source of academic support, and he appreciated how these two entities worked together. As he reflected over his past experiences, however, Participant W was able to recall a personal incident in the office that had a negative impact on his service level; “all of those support systems kind of disappeared except for you know through the email with the advisor after the incident that happened while I was working there. So I kind of lost one of the bigger support systems that the school offers for veterans.” Upon concluding his statement, Participant W shook his head from side to side and sighed in deep regret.

Others did not experience institutional influence. “Honestly, I know there are some systems here on campus like Student Academic Resource Center (SARC) for academic support and the psychological department…but I never really felt that I needed any of that…so for me…I pretty much have done this completely by myself,” stated Participant C.
Coping Mechanism

When answering interview questions number 4 and 5, the theme of coping mechanisms emerged. Question 4 asks: As a student, what support systems are or are not in place to assist you in managing your roles? Question 5 asks: Has your ability to manage your multiple roles improved or regressed with the support systems you have or have not received?

Coping mechanisms include the strategies that adult learners implemented to address the challenges that surmounted from their conflicting roles and responsibilities. Most participants stated that they had to develop and rely on their ability to manage time, multitask, and prioritize responsibilities. Others stated that their coping mechanism involved making a decision to sacrifice their wants, health, work, intended graduation date, or responsibilities to a loved one under their care.

Coping mechanisms varied based on the roles and circumstances of each participant. Further, coping mechanisms were developed based on context. Participant C described how she dealt with role overload. “I reduced some of my [credit] hours here as well to part-time student and then became a full-time caregiver to my twelve-year-old niece. Currently, I am a spouse. I am no longer employed.”

In their interviews, both participants mentioned that the social support they received from a family member, employer, and/or significant other helped them cope with all of their roles and challenges. According to Participant R, her mother played a pivotal part in providing her the emotional support she needed to relieve the stress she experienced in managing her roles. “My mother has been my support system. I ran to her
at least once a week about how much stress I am under and then I pretty much like uhhh breakdown crying and then it’s like ahhh so much better afterwards you know the cathartic release,” said Participant R. In addition to relying on the support of family members, participants received support from their employers and significant others.

Participant A stated that he was able to manage the time he needed to balance his roles through the support of his supervisor who would work with his school schedule by permitting him to, “stay longer hours or come in on Saturdays or sometimes Sunday.” Furthermore, Participant A mentioned that being in a relationship also assisted him in his ability to manage his role as a student. “Whenever I had my girlfriend we would support each other,” commented Participant A in his interview. Like the learners in Guastella (2009), coping mechanisms aided in students’ ability to role manage. Furthermore, it assisted this particular adult learner in his ability to persist towards degree attainment through the provision of social and employer support.

Financial Benefits

The underlying support for the theme of financial benefits is found in interview questions number 4 and 5. Question 4 asks: As a student, what support systems are or are not in place to assist you in managing your roles? Question 5 asks: Has your ability to manage your multiple roles improved or regressed with the support systems you have or have not received? Financial benefits were recognized as a primary means of funding an education and covering living expenses within the support system’s theme. These benefits included money and intangible support, such as babysitting, meal preparation,
and household chores. For example, one participant remarked “having my mother there to cook meals and clean and give moral support and having someone to talk to at home is nice and that helps me towards the baccalaureate degree.”

Specifically, types of financial benefits mentioned included: tangible money needed for tuition and living expenses, tuition assistance, student loans, and financial aid. According to Participant C, in regards to paying for an education, “Paying it is all completely me and student loans. I initially qualified for some scholarships but those all ran out. I initially qualified for some grants before I got married and once I got married…I made slightly more by $3,000 each year so no grants…it has been completely on us. Student loans have been the only way after I quit working that I could support myself financially.”

Participant ST acknowledged that financial aid dollars provided both her and her husband the resources to pursue her academic goals as she was unemployed. “I get financial aid for my husband and I. So if it wasn't for that, we wouldn't be able to do anything because we don't work.” She had returned to school at the age of 30 after a previous unsuccessful attempt to go to school. She stated, “I did work in the beginning…ummm once it started getting harder, I had to leave my job and my husband as did as well…so we are not working we are living off of our financial aid so the financial support really is helping a lot that is helping us pay our bills.” McClusky (1971) supported Participant ST’s statement regarding the importance of students being able to access the sufficient level of power (support systems) needed to balance their load (roles).
If Participant ST was not able to receive the appropriate amount of financial support (power), she would not be able to manage or continue her role as a student (load).

Conclusion to Research Question One

Research Question 1 asked, How does managing multiple roles influence adult learners’ ability to attain a baccalaureate degree? In their interviews, participants indicated that managing multiple roles was possible because of their support systems, which included: institutional influence, coping mechanisms such as personal and social supports, and financial benefits. Conversely, the lack of support systems influenced their ability to role manage during role conflict (Westring & Ryan, 2010; Fairchild, 2003; Fowlkes, 1987) or role overload (Matthews, Winkel & Wayne, 2013; Biddle, 1979). Evidence that the lack of a support system prohibited goal attainment did not exist, as each participant indicated that they engaged in one of the support systems.

Participant S indicated that if it were not for his friends and study groups, he would have had less time to spend on trying to understand the class material needed to complete his homework assignment. Due to social support and institutional influence, he found more time to complete his roles and responsibilities both at home and in school. The experience of Participant S illustrated McClusky’s (1971) theory of margin, power and load regarding the idea that there must be balance between a student’s level of load (roles/responsibilities) and power (support services). As Participants S’ load decreased, his power of social support increased (See Figure 6).
These findings reflected the conceptual framework in the following ways: 1) Multiple roles could lead to role conflict, role overload, and the need for role management. 2) Persistence was aided through support systems. 3) As there was an increase in power from internal motivation and external influences, the load of carrying multiple roles was lightened. Finally, the findings from question 1 supported findings from previous studies (Markle, 2015; Guastella, 2009; Thompson, Johnson-Jennings & Nitzarim, 2013).
Findings from Research Question 2

How do support systems influence the attainment of a baccalaureate degree attainment among adult learners?

Question one looked at how the theme of support systems supported non-traditional learners’ multiple roles and included the subthemes of institutional influence, coping mechanisms, and financial benefits. Conversely, question two looked at the theme of support systems through a pragmatic lens and considered how these systems supported degree attainment; support systems included: family, friends, institutional programs, and personal strategies. A greater emphasis was placed on McClusky’s load and power theory. Finally, motivations were captured in relation to degree attainment, which may help explain why some participants accessed institutional support systems while others were more dependent on social support systems. Research question two related to all theories in the conceptual framework, as evidenced in Table 7.

Table 7 provides an overview of the data analyzed in relationship to question two’s conceptual framework. Participant interviews considered to be the basis for a developed theme are indicated. The keywords are those that were frequently used during the interviews and are provided below to indicate strength of theme (Yin, 2015; Grbich, 2007).
<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
<th>Keywords that contributed to the theme</th>
<th>Theme Description one sentence</th>
<th>Interviewees that describe the phenomenon</th>
<th>Conceptual Framework Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Systems</td>
<td>Institutional programs</td>
<td>University; support, help, hard, tutoring, professor, psychological, money, loans, scholarships, EBT, GI Bill, Poor, Insurance</td>
<td>Institutional influence represented UAL’s faculty, staff, and student support programs and services (power) used by the students to assist them in their ability to role manage (balance load) and persist towards graduation.</td>
<td>R, A, S, J, W, ST, E, D</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Social Support</td>
<td>family, friends, peers, spouse, employer, feel</td>
<td>Coping Mechanisms represented the different types of social support (power) that influenced the student’s ability to manage (balance) their roles (load) and persist towards degree attainment.</td>
<td>R, J, N, E, D</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Personal Strategies</td>
<td>Self-evaluation focus, planning, technology use</td>
<td>Personal strategies are those methods adopted that supported degree attainment.</td>
<td>R, ST, D</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
</tr>
<tr>
<td>Theme</td>
<td>Subthemes</td>
<td>Keywords that contributed to the theme</td>
<td>Theme Description one sentence</td>
<td>Interviewees that describe the phenomenon</td>
<td>Conceptual Framework Relationship</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------</td>
<td>----------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Motivations</td>
<td>Better Opportunities</td>
<td>Money, Raise, promotion, opportunities, need, Jobs</td>
<td>Better Opportunities represented a motivating factor that influenced the student’s persistence towards degree attainment.</td>
<td>A, S, J, ST, D</td>
<td>Persistence Theory (Bean &amp; Metzner, 1985; Tinto, 1975, 1993, 2012)</td>
</tr>
<tr>
<td>Motivations</td>
<td>Make a Difference</td>
<td>Better, difference, care, impact, motivation</td>
<td>Make a Difference represented a motivating factor that influenced the student’s persistence towards degree attainment.</td>
<td>W, E</td>
<td>Persistence Theory (Bean &amp; Metzner, 1985; Tinto, 1975, 1993, 2012)</td>
</tr>
<tr>
<td>Motivations</td>
<td>Lifetime Goals</td>
<td>Dreams, goals, career</td>
<td>Lifetime Goals represented a motivating factor that influenced the student’s persistence towards degree attainment.</td>
<td>R, C, N</td>
<td>Persistence Theory (Bean &amp; Metzner, 1985; Tinto, 1975, 1993, 2012)</td>
</tr>
</tbody>
</table>
Support Systems Subthemes

Regarding research question two, three sub themes were evident, including: institutional programs, social supports, and personal strategies. Interview questions number 6, 8, 9 and 10 were analyzed in relationship to support systems. Question 6 asks: Do your roles affect your ability to attain a baccalaureate degree? Question 8 asks: As a student, what support systems are or are not in place to assist you in your attainment of a baccalaureate degree? Question 9 asks: Has your ability to attain a baccalaureate degree improved or regressed with the support systems you have or have not received? Question 10 asks: Would you like to share any additional comments on how your roles have impact your journey towards attaining a baccalaureate degree?

The findings of the inquiry indicated that institutional programs provided nontraditional students the academic (tutoring, supplemental instruction, etc.) and personal support (counseling and psychological services, student accessibility services, etc.) needed to role manage and persist towards degree attainment (McClusky, 1971). As with institutional programs, social support (from peers, family, spouses, etc.) provided nontraditional students the encouragement, motivation, and role assistance needed to persist towards degree attainment (McClusky, 1971; Bean & Metzner, 1985; Tinto, 1975, 1993, 2012). Lastly, personal strategies represented the various methods that adult learners participated in to overcome their challenges towards degree attainment (McClusky, 1971; Bean & Metzner, 1985; Tinto, 1975, 1993, 2012).
Institutional Support

Interview questions number 6, 8, 9 and 10 provided findings that indicated the theme of institutional support. Question 6 asks: Do your roles affect your ability to attain a baccalaureate degree? Question 8 asks: As a student, what support systems are or are not in place to assist you in your attainment of a baccalaureate degree? Question 9 asks: Has your ability to attain a baccalaureate degree improved or regressed with the support systems you have or have not received? Question 10 asks: Would you like to share any additional comments on how your roles have impact your journey towards attaining a baccalaureate degree?

Institutional programs were not just programs at the university, but also included federal programs, scholarships, and military benefits that made schooling attainable. Each participant indicated that participating in these financial programs supported them and allowed them to remain students. Participant R shared that she received financial support from the United States Department of Agriculture, Food, and Nutrition Service Supplemental Nutrition Assistance Program (SNAP). The SNAP program provides eligible, low-income individuals and their families financial assistance in the form of an electronic benefit transfer (EBT) to pay for groceries. It also provides a cell phone with limited minutes and data. Had it not been for EBT benefits, participant R would have had to either withdraw from school, take fewer classes, or secure another place of employment to avoid starvation. “…because I work the minimum of 20 hours a week…I can get the EBT benefits…and that pays for all my groceries so that I don't have to worry about starving every month,” said Participant R. Other programs, such as student loans,
afforded Participant A’s tuition. He expressed that without financial assistance, he would not be able to continue his role as a UAL student. “I couldn't afford school by myself so I got a student loan,” said Participant A.

Institutional supports did not just include funding or other programs, but also the people within the institution. Participant E’s institutional support was not from a formalized program within UAL, but rather from the learning assistants and professors who taught in the program. He added,

In all my classes I've taken in physics we have learning assistants who are other students who have already taken the class. They spend time outside of class hours to help you with your homework or help you prepare for test and everything and they just been through it like within the past year or so they are very familiar with what’s going to be tested on what kind of information that is on the homework.

Institutional programs, both formal and informal, were recognized by the interviewees in this study as making a difference towards their degree attainment. Despite the available support for some students, the same reality does not exist for all. As a result, these students find it difficult to obtain the grades that they need to persist towards graduation. “I didn't receive any [institutional] support. And my ability to obtain a degree regressed a lot. I have gotten lower grades and I have had less time to study…,” said Participant A. Later in the interview, however, he did acknowledge social supports.
Social Supports

Social supports encompassed support from personal social connections, including but not limited to: family, friends, co-workers, employers, and employees. Forms of their support included: caretaking of family, cooking, cleaning, emotional support, and financial contributions. Participant N noted that academic and financial services were not a source of support that she could depend on, rather her most valuable source of support came from the assistance of her husband and mother. Participant N said,

My husband knew that I have to get my education done and he was very flexible with cooking dinners and working…and he worked a lot a lot…without his help I don't think that it would be possible. And my mom of course because now when I come to school my mom take care of my baby throughout the day and even at times that I have to study at night…she takes care of her at nighttime. So that’s a big support system that I have there.

Participant ST echoed the importance of her family support by stating, “My support system is my husband and his mother- my mother in law. She's awesome. She will sometimes pick me up from the bus stop if he's doing something with the kids or she will take them over the weekend so we can study so that helps a lot.” Participant S commended his friends as his social support system. He stated, “Sometimes I would have trouble with some of my classes and I would always find friends to group up with. And ummm we would study together and try to do better in classes.” He went on to speak about his group of friends as an invaluable resource towards the content understanding of curriculum. Participant S commented, “I would probably say that the most important
resource was uhhh getting with friends and attending group studies and things like that. This helped me because alone it would take me longer to understand the materials.”

According to Participant R, as previously mentioned, her mother played a pivotal part in providing her the emotional support she needed to relieve the stress she experienced in managing her roles. “My mother has been my support system. I ran to her at least once a week about how much stress I am under and then I pretty much like uhhh breakdown crying and then it’s like ahhh so much better afterwards you know the cathartic release,” said Participant R. In addition to relying on the support of family members, participants also received support from their employers and significant others. “My boss at the physics department is extremely lenient on my schedule because she knows how stressed I've been and she's pretty much become a second mother to me. Her and her daughter hang out with me on the weekends sometimes we go to the lake or city walk or whatever and it’s just like having another family unit here, one that I can actually get along with,” said Participant R. Likewise, Participant A recognized the power of social advice on his degree path after an initial falter, “I would say that my ability to obtain a baccalaureate degree has improved because I used everything (the guidance I received from friends and my department advisors) as a stepping stone. This made me more discipline and serious… =about where I want to go in life.” Each of these cases confirmed the importance of social support evident in other research related to nontraditional learners and degree attainment (Guastella, 2009).
Personal Strategies

When answering interview questions number 6, 8, 9 and 10, the theme of personal strategies was realized. Question 6 asks: Do your roles affect your ability to attain a baccalaureate degree? Question 8 asks: As a student, what support systems are or are not in place to assist you in your attainment of a baccalaureate degree? Question 9 asks: Has your ability to attain a baccalaureate degree improved or regressed with the support systems you have or have not received? Question 10 asks: Would you like to share any additional comments on how your roles have impact your journey towards attaining a baccalaureate degree?

Participant ST’s personal strategy of self-evaluation helped her focus on her goal. Self-evaluation is consistent with what is known about persistence theory (McMillan & Hearn, 2008) and self-regulation (Bandura, 1989). After working full-time as a supervisor at a mom and pops pizza place over the summer, and then part-time during the school year, she indicated “I’d be working on weekends and like Friday, Saturday, and Sunday and I found it just wasn't enough time to study that’s like prime studying time on the weekend. So, I had to just I just realized that my grades were slipping a little bit and I just couldn't manage the working with the class load.” She then went on and changed her work schedule in favor of more study time.

Purposeful focusing and planning helped Participant D address frustrations regarding his health reasons in the following way, “So I was frustrated at first and uhhh so after getting past that period of frustration I begin to narrow in on a focus to begin to take care of the obstacles one at a time its just so happens that I didn't have an
opportunity to do it in a place where I would have stable housing.” For participant D, health issues spun his academic life into a tailspin, which were later mitigated by focus, planning, and control.

Participants D and R addressed their busy schedules through the use of technology as a personal coping strategy. As a student, volunteer, employee, and McNair’s scholar’s program mentor, Participant D stated that he conducted mentoring sessions with his mentee “virtually with students through Face Time”. Participant R self-tutored herself in content area deficits through the use of YouTube and online lectures. All of these personal strategies, including self-evaluation, focus, planning, and technology use, were support systems for these nontraditional learners. The interviewees felt that these strategies played a significant part in assisting them towards degree attainment.

Motivations

Interview question seven was the basis for the theme of motivations. Question 7 asked: What motivates you to continue your pursuit of a baccalaureate degree? Three subthemes related to the theme of motivations, including: pursuing better opportunities, making a difference in the world, and fulfilling lifetime goals. Motivations are a part of persistence theory since motivation is a source of purpose and encourages students to continue their goals towards degree attainment. In addition, motivation is a driving force behind student involvement in support systems and the development of coping mechanisms to aid in managing roles and persisting towards degree attainment.
Motivation at its foundation is a support system (Pintrich, 1999; Bandura, 1989; Tinto, 1975, 1993, 2012). It is what people rely on both consciously and unconsciously to persist towards a goal. In this vein, motivation emerged as a theme answering how support systems influence degree attainment.

Better Opportunities

Motivation was a support system for managing multiple roles beyond other supports. Participant S was motivated by pursuing better opportunities even when she had to give up a job she loved to continue her education. “I've been in school for about seven years and this is because some semesters I would have to take off because in being a police officer my job would switch me from night shift to day shift . . . but this didn't stop me from wanting to graduate but motivated me to do better,” said Participant S. She eventually left her job to put more attention and devotion towards graduating sooner and starting a new career. Her degree persistence was supported by her motivation.

Motivating factors that encouraged Participant D to continue pursuing his degree were the increasing expectations from the job market and the hopes of a better life. Participant D stated,

The job market is looking for people who are highly skilled and qualified and again I had my comp certificate in computer technician. There was a number of places that I could have worked but the doors was just not opening I did not have
the skill levels that were required. What keeps me motivated is that I am resourceful and I am a hard worker. I came to start something that I am going to complete… so with what motivates me is a better life.

Participant ST shared that her motivation came from her turning 30; better opportunities; and her desire to leave the retail, sales, and food industry. She stated, “I've had years of experience working with retail sales food industry and just hated it ...it’s better opportunities for myself and then for my family”, said Participant ST.

Making a Difference

Intrinsic motivators are intangible sources of encouragement to complete an action or behavior. For instance, within this study, participants indicated that their sources of intrinsic motivation stemmed from their desire to make a difference.

Participant W desired to make a difference by getting an education because of his family's propensity for incurable diseases. He noted his determination for completing an education came from a determination to help cure the incurable. “I have a lot of cancer and diabetes in my family and you know just different diseases that aren't currently you know a one pill fix type thing so umm I want to work towards that I know that I'm not so pompous to think that I am going to cure cancer but if I can be a part of a team that works together towards cancer solutions,” said Participant W.

Participant E stated that his biggest motivation was his desire to make a difference in the world and support his mother in a way that he had not been able to before. “ummm basically what’s motivate me is that I wanted to actually do something make a difference
in the world…my secondary motivation is helping my mother and I will be able to help her out a lot more with a better job you get better pay and ummm I can help out with my family,” said Participant E.

Fulfilling Lifetime Goals

Within this study, participants mentioned several factors that contributed towards their ability to persist and attain a baccalaureate degree. One of these factors included the student’s motivation to fulfill their lifetime goals. The subsequent section consists of the results from data collected.

Two respondents, participants C and N, stated that their self-determination and lifetime dreams were a major source of motivation. “Because nothing in the world will stop me from doing this. I want to be educated. I love chemistry. I love what I do. I already have a career path. I already have a goal in mind. I want to work in the citrus industry and I want to optimize the manufacturing process that they have for the QA system,” said Participant C. He had a goal that he felt was only attainable with the completion of a degree.

According to Participant N, as an international student, obtaining a degree from the United States is a prestigious accomplishment and dream. “It’s been my dream to do something here in the USA…to have a degree here…to go for higher studies.” The results of these findings are consistent with several studies regarding the influence of motivation on role manage, persistence, and degree attainment (Bandura, 1989; Deckers, 2005; McMillan & Hearn, 2008; Pintrich, 1999).
Conclusion of Findings

The findings of the study supported the conceptual framework of nontraditional learners’ degree attainment. An overview of these findings are provided by research question one, which has two themes related to it: How does managing multiple roles as adult learners influence baccalaureate degree attainment? Themes that were evidenced to answer this question include challenges and support systems. Two themes were evidenced from the analysis of research question two: How do support systems influence the attainment of a baccalaureate degree attainment among adult learners?

Role theory (Biddle, 1979) and McClusky’s (1971) theory of margin, power and load were evident in the analysis of research question one, while persistence theory (Tinto, 1975, 1993, 2012; Bean & Metzner, 1985) and McClusky’s (1971) theory of margin, power and load were evident in the analysis of research question two. These theories are inextricably intertwined within the conceptual framework related to the aforementioned research questions.

Finally, the findings from the interviews of these 10 participants indicated that, despite challenges, nontraditional students were able to access support systems and develop coping mechanisms and personal strategies to manage roles and persist towards degree attainment. Additionally, through the analysis of interviews, the interviewees viewed the support systems of family, friends, and institutions as pivotal in their quest for degree attainment.

Chapter 4 documented interview data and provided analysis of nontraditional learners regarding their roles and degree attainment by research question. While chapter 4
documented the findings, chapter 5 provides interpretations and insights as to how these findings relate to the theories evidenced in the conceptual framework.
CHAPTER FIVE: DISCUSSION

Introduction

Chapter 5 provides an overview of the entire study and why it was conducted. Within this chapter, the findings are summarized in relationship to the conceptual framework and the learning theories associated with the framework. The conclusion, limitations of the study, suggestions for future research and recommendations, and the researcher’s reflections are presented. The purpose of this study was to investigate the influences of role management and support systems on nontraditional learners’ baccalaureate degree attainment.

The conclusions/assertions of the study included: a) Nontraditional learners can manage multiple roles despite the challenges of role overload, time management, and personal life matters that may occur during degree attainment. b) Role management during the degree attainment process are aided by institutional influence, personal coping mechanisms, and social support. c) Support systems, whether formal or informal, such as institutional programs, social supports, and personal support strategies aid in degree attainment among nontraditional learners. d) Motivations such as looking for better life and career opportunities, a desire to make a difference, and pursuing lifetime goals provide support for nontraditional learners towards degree attainment.
Overview of Study

The study examined how adult learners’ role management and support system influenced nontraditional learners’ ability to manage their roles and attain a baccalaureate degree from UAL. The researcher conducted interviews of ten respondents who met the research criteria to address the study’s purpose. Findings were collected and analyzed to determine the influences related to degree attainment.

The ten students who participated in the study met the following criteria: 1. A UAL undergraduate student. 2. A declared STEM major. 3. A “moderately” or “highly” nontraditional student. Further, the interviewees represented varying viewpoints based on their development as indicated in Levinson’s (1978) Theory of Adult Development, which was utilized to categorize each participant into one of the following developmental stages: Entry Life Structure for Early Adulthood (age 22-28); Age 30 Transition (29-33); Culminating Life Structure for Early Adulthood (34-40); Mid-Life Transition (41-45); and Early Life Structure for Middle Adulthood (46-50).

Participants were deemed nontraditional according to Horn’s (1996) definition of a nontraditional student, which states that, “students are considered to be ‘minimally nontraditional’ if they have only one nontraditional characteristic, ‘moderately nontraditional’ if they have two or three, and ‘highly nontraditional’ if they have four or more” (NCES, 2002, p. 3). Nontraditional learners’ characteristics include: delayed enrollment, part-time enrollment, full-time employed, financially independent, has a dependent other than a spouse, a single parent, and does not have a high school diploma.
After the interviews were completed, the researcher transcribed the audio recordings and analyzed the data through thematic coding. The results of these findings are located in Chapter 4. The guiding conceptual framework was the basis for the analysis of the bounded case study of nontraditional learner and degree attainment. See Figure 1.

The conceptual framework guided the research questions, the findings analysis, and the resulting assertions (See Table 8). At the center of the conceptual framework is McClusky’s Theory of Margin, Power, and Load. As nontraditional learners’ perceptions of power (supports) increased, the perception of load (challenges) decreased. Tinto (1975, 1993, 2012), Bean and Metzner’s (1985) persistence theory wraps around the Theory of Margin, Power and Load towards degree attainment. Finally, role theory considers the nontraditional learner from varying aspects, roles, and responsibilities.

Table 8: Assertion Matrix

<table>
<thead>
<tr>
<th>Assertions</th>
<th>Sample Findings</th>
<th>Conceptual Framework Relationship</th>
<th>Recommendations (Action or Future Research)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Nontraditional learners can manage multiple roles despite the challenges of role overload, time management, and personal life matters that may occur during degree attainment.</td>
<td>Multiple roles could lead to role conflict, role overload, and the need for role management. Participant C stated, “Initially, I was a full-time employee, student and caregiver. After marriage, halfway through my degree, I had to adjust my employment to part-time.”</td>
<td>Role Theory (Biddle, 1979)</td>
<td>Faculty and advisors could be trained on adult learner populations (demographics, role challenges, etc.) and how to incorporate strategies into their teaching and advising sessions to further aid in the adult learners’ degree attainment.</td>
</tr>
</tbody>
</table>
### Assertions

<table>
<thead>
<tr>
<th>Assertions</th>
<th>Sample Findings</th>
<th>Conceptual Framework Relationship</th>
<th>Recommendations (Action or Future Research)</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Role management during the degree attainment process are aided by institutional influence, and personal coping mechanisms and social support.</td>
<td>Persistence was aided through support systems, Participant R stated, “My mother has been my support system. I ran to her at least once a week about how much stress I am under and then I pretty much like uhhh breakdown crying and then it’s like ahhh so much better afterwards you know the cathartic release.”</td>
<td>Role Theory (Biddle, 1979) and Theory of Margin, Power and Load (McClusky, 1971)</td>
<td>Institutions should consider continuing and in some cases developing programs and services that will assist adult learners in their understanding of how its support services can be used in collaboration with the student’s personal coping mechanisms and social support to aid in role management.</td>
</tr>
<tr>
<td>c) Support systems whether formal or informal like institutional programs, social supports, and personal support strategies aid in degree attainment among nontraditional learners.</td>
<td>As there was an increase in power from internal motivation and external influences the load of carrying multiple roles was lightened. Participant N, “My husband knows that I have to complete my degree so he flexes his work hours and cook dinners for the family… and my mom takes care of the baby throughout the day and at times that I have to study at night.”</td>
<td>Theory of Margin, Power and Load (McClusky, 1971)</td>
<td>Educational administrators could develop strategies to revamp current support systems to include an orientation/ information session for recently admitted nontraditional students to learn about the formal and informal institutional programs, and how social and personal support strategies that will assist them in degree attainment.</td>
</tr>
<tr>
<td>d) Motivations like looking for better life and career opportunities, a desire to make a difference, and pursuing lifetime goals provide support for nontraditional learners towards degree attainment.</td>
<td>Motivation was the driving force behind the student’s involvement in support systems and developing coping mechanisms to aid them in managing their roles and persisting towards degree attainment. Participant E, “I want to make a difference in the world… and get a better paying job so that I can help my mother…my family.”</td>
<td>Persistence Theory (Bean &amp; Metzner, 1985; Tinto, 1975, 1993, 2012)</td>
<td>Part of the admission process could include a motivation essay to assist the adult learners in processing the purpose for beginning or continuing their education. Following admission, adult learners could be afforded other opportunities to revisit and reiterated their motivation statements.</td>
</tr>
</tbody>
</table>
Discussion

After a thorough review of the data collection and analysis, several themes related to the conceptual framework became apparent, including challenges, support systems, and motivations. Challenges and support systems are themes related to research question one, while the support systems and motivations are the themes related to research question two.

Research Question One Discussion and Implications

Research question one asked, “How does managing multiple roles influence adult learners’ ability to attain a baccalaureate degree?” The findings of the study indicated that role management was critical for attaining a baccalaureate degree. In order to assist adult learners in their ability to role manage, students often depended on the support of their institution, family, and finances. Further, learners managed roles by being willing to adjust and incorporate strategies and systems in light of their multiple roles and responsibilities. Coping mechanisms aided in nontraditional learners’ persistence (Tinto, 1975, 1993, 2012) towards degree attainment.

In addition to the number of roles, the findings indicated that the responsibilities of adult learners’ roles influenced their ability to role manage. Participant C and Participant N, self-identified as mothers, had different levels of demand and responsibilities assigned to their roles. For example, Participant C stated that she would have to cook a week's worth of meals on Sunday to make sure that everyone in her household was able to eat during the week. Participant N had assistance from her
husband and her mother, who took over the majority of her roles and responsibilities as a mother. The concluding assertions: a) Nontraditional learners can manage multiple roles despite the challenges of role overload, time management, and personal life matters that may occur during degree attainment; and b) Role management during the degree attainment process are aided by institutional influence, personal coping mechanisms, and social support, which are grounded in the findings presented here in chapters 4 and 5.

Research question one referenced the conceptual framework (See Figure 1), which included Biddle’s Role Theory (1979). Findings were examined as to how an adult learner's active engagement in multiple roles lead to the role conflict, strain and overload without the successful integration of support systems. For example, like actors assuming a role on a stage perform, adult learners perform a role or roles within their contextual social structures (Biddle, 1979). As a result, the conceptual framework’s role theory, inclusive of role management, role conflict, and role overload were evidenced in the analysis of the findings.

Nontraditional learners engaged in multiple roles often experienced role conflict and overload, which in some cases slowed the process towards degree attainment. Participant C stated that she was a full-time student and a full-time employee; however, as her roles increased and the curriculum for her major became more difficult, she was unable to remain a full-time student and had to enroll part-time. The results of this decision delayed her time to graduate. The alignment of the findings related to role theory (Biddle, 1979) indicated that role conflict and overload were challenges for nontraditional
learners who often manage more roles than their traditional counterparts (Trueman & Hartley, 1996). In some cases, these challenges impeded degree attainment and were mitigated by support systems.

**Role Management**

The study’s participants self-reported that, as undergraduate students, they engaged in two or more roles. Unfortunately, in the process of managing their roles, the participants often found themselves in intrapersonal conflict, “a situation in which a person is motivated to engage in two or more mutually exclusive activities” (Rahim, 2011, p. 97). When this occurred, the adult learner often felt that they had to choose between meeting the demands of one role at the expense of another role, which led to role overload and conflict.

**Challenges**

The analysis of the findings indicated that the students’ challenges influenced the students’ ability to manage their roles. Each participant experienced some of the same challenges to role management. These challenges include time management, travel time, class scheduling, and role conflict. Participant R stated, “I had to learn how to manage my time in order to complete the responsibilities assigned to my role as a student and an employee.”
Support Systems

Participants indicated that support systems influenced their ability to role manage. Participant S’s comment about the help of friends and his study group provided evidence of a support system that helped him manage time so it was easier to complete tasks in his other roles. The experience of Participant S illustrated McClusky’s (1971) Theory of Margin, Power and Load because as his power (friends, study group, and time management) increased, the level of load (roles/responsibilities) decreased. The assertions realized from the findings for research question one were grounded in the conceptual framework.

Research Question Two Discussion and Implications

Research question two: How do support systems influence the attainment of a baccalaureate degree attainment among adult learners? Having support systems, which included institutional programming, social supports such as family and friends, personal strategies, and motivations positively influenced nontraditional learners’ degree attainment. Research Question two connected to the conceptual framework through McClusky’s (1971) Theory of Margin, Power and Load, and Tinto (1975, 1993, 2012) and Bean and Metzner’s (1985) persistence theory. Support systems like personal strategies, institutional programs, social supports, and personal motivation provided load lightening (McClusky, 1971) that in turn supported nontraditional learners’ persistence (Tinto, 1975, 1993, 2012; Bean & Metzner, 1985) The support systems assertions builds
on the work of Tinto, (1975, 1993, 2012) that students’ persistence can be shaped by internal and external forces and that persistence is necessary for retention.

Without support, all participants indicated they would not be at the precipice of degree attainment. Whether it was financial aid, student loans, emotional support, or the intrinsic motivations possessed by the interviewees, these support systems were recognized as pivotal in the nontraditional learners’ degree attainment process. For example, Participant C stated that she would not be able to complete her baccalaureate degree without financial assistance.

Participant E agreed with Participant C and also recognized the impact of the emotional and physical support of his mother towards his degree attainment. He stated, “...she gives me basic pep talks every now and . . . cooks dinner every now and then and . . . that helps out. Spiritual support was an unrealized support system mentioned by participant J. It was a part of his intrinsic motivation to stay in school. “When I left construction I just didn't have any direction. . .I spent a lot of time praying about it and seeking God and asking Him what He want me to do with my life and I felt like he said go to college and get an engineering degree,” said Participant J.

Finally, the findings indicated that support systems had an influence on nontraditional learners’ ability to attain a baccalaureate degree. Themes related to the findings for research question two included motivations (a type of support) and institutional programming, personal strategies, and social supports.
Motivations

Motivation represented the ways students were motivated to manage their roles and persist towards degree attainment. Adult learners’ motivation to graduate has an influence on their ability to attain a baccalaureate degree. For instance, when a student was not motivated, he or she might not have put in the time and effort needed to become academically successful. Participants stated that they were motivated by the encouragement they received from their family members, guidance counselors, advisors and friends; their faith in God; their determination to meet goals; their desire to make a difference in the world and to make a better life for themselves and the life of their loved ones. Without these streams of motivation, many of the participants would have been discouraged or discontinued their pursuit of a baccalaureate degree.

Support Systems

Within the findings of the study for research question two, support systems enabled students to persist by reducing their load. The findings confirm research from Westring and Ryan (2010) that personal and institutional support systems lessen strain and stress. Positive support systems are a factor towards degree attainment and academic success (Santiago, 2007; Pascarella & Terenzini, 2005; Hernandez, 2000). Support systems including motivations contribute to learner persistence. The rest of the chapter includes the limitations, future research, and concluding remarks.
Limitations of the Study

1. The researcher is the key instrument used in the study (Stake, 2001), which could lead to unintentional biases in the interpretation of the data (Creswell, 2014).

2. The study focused on nontraditional learners and did not include a comparison of traditional aged students to determine if there were similarities or differences in their experiences towards degree attainment.

3. Participants in this study were limited to STEM majors and did not include non-STEM majors.

4. Only ten participants were included in the study.

Recommendations for Future Research

1. According to the findings indicated in this study, support systems were an integral component of persistence towards degree attainment. Future research is needed to understand which institutional support systems (both formal and informal) provided the best support for nontraditional learners. Knowing this information could potentially aid policymakers, colleges, and universities in funding these supports systems and programs for degree attainment to mitigate attrition, a current known problem in higher education (Fincher, 2010; Jones & Lau, 2010; Wood-Wyatt, 2008; Kazis, 2007).

2. Based on the findings and a cursory analysis of the literature, there is minimal information related to how nontraditional learners use technology as a means
to foster persistence and role manage. A qualitative investigation of personal strategies afforded by technology might provide practical applications and strategies for other nontraditional learners to consider as a support to degree attainment.

3. The study only included nontraditional learners’ experiences. Future studies should consider the experience of faculty, administrators and advisors who interact with them. Information gained from this analysis could potentially influence the training of faculty, administrators and advisors.

4. Other research could include other academic majors. Degree requirements and time commitments are quite different based on a student’s major. The study solely focused on the experience of adult learners in STEM and did not include the experience of those students who were not in STEM majors.

5. Finally, understanding the experiences by gender may help to personalize potential programs related to role management by gender. The experiences by gender were not analyzed, but it was noted that roles differed by gender. The level of responsibilities of the various role was not explored (Markle, 2015).
Conclusion

Institutions of higher education are concerned about the persistence and retention of students pursuing a baccalaureate degree in the United States (Pascarella & Terenzini, 2005). The research questions in this case study sought to analyze nontraditional learners’ degree attainment by investigating their multiple roles and support systems. As the enrollment of nontraditional learners continues to increase in the future (NCES, 2009, 2011a, 2011b), the need to address nontraditional learners’ specific needs (role management, and challenges) specific to degree attainment grows.

Within this qualitative case study were findings from ten interviews that documented some of the challenges these nontraditional learners faced that may be generalizable to other nontraditional learners. The study contributed to the literature base of nontraditional learners and attainment. While Guastella (2009) examined learners at a private institution of higher education, this study analyzed nontraditional learners at a public institution. Markle’s research (2015) examined aspects of degree attainment, but her study population consisted of only females. In contrast, this study included both genders. The findings of the study indicated that role management and support systems could positively influence successful degree attainment.
APPENDIX A: IRB APPROVAL OF EXEMPT HUMAN RESEARCH
Approval of Exempt Human Research

From: UCF Institutional Review Board 11
FWA0000351, IRB#0001138

To: Shirdricka Lee Ann Roberts

Date: September 06, 2016

Dear Researcher:

On 09/06/2016, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: THE INFLUENCE OF ROLE MANAGEMENT ON THE BAccalaureate Degree Attainment of Adult Learners in STEM
Investigator: Shirdricka Lee Ann Roberts
IRB Number: SSE-16.12456

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRB, so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Kamille Chaparro

Signature applied by Kamille Chaparro on 09/06/2016 01:02:40 PM EDT

IRB Coordinator
APPENDIX B: RELEASE FORM- EXPLANATION OF RESEARCH FOR DEMOGRAPHIC SURVEY
EXPLANATION OF RESEARCH

Title of Project: THE INFLUENCE OF ROLE MANAGEMENT ON THE BACCALAUREATE DEGREE ATTAINMENT OF ADULT LEARNERS IN STEM

Principal Investigator: Shirlinda LeeAnn Roberts, MPA
Faculty Supervisor: Thomas D. Cox, EdD

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of this study is to use qualitative methods to investigate how an adult learner's stage of development will influence their ability to manage their multiple roles. The study will also investigate how an adult learner's level of role management, based on their stage of development, can influence their ability to graduate with a baccalaureate degree in science, technology, engineering or mathematics from a four year public institution.
- Participants must be between the ages of 22 and 50.
- As a participant you will be asked to complete a brief questionnaire via Qualtrics, an online survey, consisting of closed and open-ended demographic inquiries, will be used to gain a comprehensive insight into the academic, personal and professional background of the respondents.
- At the end of the survey, you will be asked to provide your contact information if you wish to participate in Phase Two of the study. The survey can be completed in any location via computer, cell phone or any other electronic device that has Internet access. Please Note: Your survey responses are anonymous unless you choose to provide your contact information at the end of the survey.
- The expected duration of your participation and time commitment to the completion of the online survey is 10 minutes.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, talk to: LeeAnn Roberts, Graduate Student, UCF College of Education and Human Performance (384) 521-0472 or Dr. Thomas D. Cox, Faculty Advisor, UCF College of Education and Human Performance, Department of Child, Family, and Community Sciences (407) 823-0714 or by email at Dr.Thomas.Cox@ucf.edu

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.
APPENDIX C: DEMOGRAPHIC QUESTIONNAIRE
Demographic Questionnaire: Adult Learners

Q1 What is your major?
- Aerospace Engineering (1)
- Mechanical Engineering (2)
- Industrial Engineering (3)
- Civil Engineering (4)
- Construction Engineering (5)
- Environmental Engineering (6)
- Electrical Engineering (7)
- Computer Engineering (8)
- Computer Science (9)
- Photonics Science and Engineering (10)
- Information Technology (11)
- Biology (12)
- Bio-Medical Sciences (13)
- Bio-Technology (14)
- Chemistry (15)
- Physics (16)
- Mathematics (17)
- Other (18) ________________

Q2 What is your enrollment status?
- Full-Time (1)
- Part-Time (2)

Q3 What is your age range?
- 22-28 (1)
- 29-33 (2)
- 34-40 (3)
- 41-45 (4)
- 46-50 (5)

Q4 How old were you when you first enrolled in college?

Q5 How old were you when you began your studies at UCF?
Q6 As a student, were you a primary caregiver of an elderly or disabled relative?
☐ Yes (1)
☐ No (2)

Q7 What form of support do you have to manage your roles and responsibilities?

Q8 Describe the multiple roles and responsibilities you have as a student.

Q9 Does your stage of development influence your ability to manage multiple roles?

Q10 Does your stage of development affect your attainment of a baccalaureate degree in STEM?

IF YOU WISH TO PARTICIPATE IN PHASE TWO OF THE STUDY, PLEASE COMPLETE THE FOLLOWING:

Q1 First Name

Q2 Last Name

Q3 What is your phone number?

Q4 What is your email address?
APPENDIX D: RELEASE FORM- EXPLANATION OF RESEARCH FOR INTERVIEW QUESTIONS
EXPLANATION OF RESEARCH

Title of Project: THE INFLUENCE OF ROLE MANAGEMENT ON THE BACCALAUREATE DEGREE ATTAINMENT OF ADULT LEARNERS IN STEM

Principal Investigator: Shirdricka LeeAnn Roberts, MPA

Faculty Supervisor Thomas D. Cox, EdD

You are being contacted because you have previously completed a survey in which you provided your contact information to participate in Part Two of this study. Whether you take part is up to you.

- The purpose of this study is to use qualitative methods to investigate how an adult learner’s stage of development will influence their ability to manage their multiple roles. The study will also investigate how an adult learner’s level of role management, based on their stage of development, can influence their ability to graduate with a baccalaureate degree in science, technology, engineering or mathematics from a four year public institution.

- As a participant, you will be asked to participate in a one-hour audio taped interview on the UCF Main Campus in Engineering Building 1 Room 258. If you do not wish to be audio taped, you will not be able to participate in the study. If you are audio taped, the tape will be kept in a locked, safe place. The recordings will be erased and/or destroyed following the transcription of the interviews. However, these transcriptions will be kept for five years.

- As previously stated, the expected duration of your participation and time commitment to the completion of the interview is one hour. However, the researcher may contact you outside of the initial interview to clarify your interview transcriptions from September 2016 through October 2016.

- Please Note: Participants must be between the ages of 22 and 50. Each participant will receive a $20 gift card for completing their one hour interview. If the interview is partially completed, the participant will receive a $10 gift card.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, talk to: LeeAnn Roberts, Graduate Student, UCF College of Education and Human Performance (804) 521-0472 or Dr. Thomas D. Cox, Faculty Advisor, UCF College of Education and Human Performance Department of Child, Family, and Community Sciences at (407) 823-6714 or by email at Dr.Thomas.Cox@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.
APPENDIX E: INTERVIEW QUESTIONS
<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RQ 1</td>
</tr>
<tr>
<td>1. Describe the roles you managed during your time as a student. (For example, were you married, a parent, and/or an employee while simultaneously being a student?)</td>
<td>X</td>
</tr>
<tr>
<td>2. Share your experience in managing your roles as a student?</td>
<td>X</td>
</tr>
<tr>
<td>3. How has your experience in role management made you feel? (For example, did you feel stress, overwhelmed, motivated and/or excited in your efforts to role manage?)</td>
<td>X</td>
</tr>
<tr>
<td>4. As a student, what support systems are or are not in place to assist you in managing your roles? (For example, did you have academic, familial, psychological or financial assistance?) Please explain.</td>
<td>X</td>
</tr>
<tr>
<td>5. Has your ability to manage your multiple roles improved or regressed with the support systems you have or have not received? Please explain.</td>
<td>X</td>
</tr>
<tr>
<td>6. Does your roles affect your ability to attain a baccalaureate degree in STEM? Please elaborate.</td>
<td>X</td>
</tr>
<tr>
<td>7. What motivates you to continue your pursuit of a baccalaureate degree in STEM?</td>
<td>X</td>
</tr>
<tr>
<td>8. As a student, what support systems are or are not in place to assist you in your attainment of a baccalaureate degree in STEM? (For example, did you have academic, familial, psychological or financial assistance?) Please explain.</td>
<td>X</td>
</tr>
<tr>
<td>9. Has your ability to attain a baccalaureate degree improved or regressed with the support systems you have or have not received? Please explain.</td>
<td>X</td>
</tr>
<tr>
<td>10. Would you like to share any additional comments on how your roles have impact your journey towards attaining a baccalaureate degree in STEM?</td>
<td>X</td>
</tr>
</tbody>
</table>
APPENDIX F: LEVEL 1 ANALYSIS RESULTS
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Feelings</th>
<th>Time</th>
<th>Academics</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles</td>
<td>Personal Issues</td>
<td>Time Management</td>
<td>Learning</td>
<td>Work</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Stress</td>
<td>Schedule Conflict</td>
<td>Tutoring</td>
<td>Federal Work Study</td>
</tr>
<tr>
<td></td>
<td>Emotional Support</td>
<td>Multitasking</td>
<td>Academic Support</td>
<td>Supervisor Support</td>
</tr>
<tr>
<td></td>
<td>Breakdown</td>
<td>Priorities</td>
<td>Class Support</td>
<td>Work Benefits</td>
</tr>
<tr>
<td></td>
<td>Overwhelming</td>
<td>Flexibility</td>
<td>Persistence</td>
<td>Job Opportunities</td>
</tr>
<tr>
<td></td>
<td>Discouragement</td>
<td>Full-Time</td>
<td>Retention</td>
<td>Unemployed</td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
<td>Part-Time</td>
<td>Class Difficulty</td>
<td>Employer Requirements</td>
</tr>
<tr>
<td></td>
<td>Frustration</td>
<td>Convenience</td>
<td>Upper Level Courses</td>
<td>Work Conflict</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Degree Requirements</td>
<td>Promotion</td>
</tr>
<tr>
<td>Tired</td>
<td></td>
<td>Balance</td>
<td>Study Groups</td>
<td>Professional Development</td>
</tr>
<tr>
<td>De-Stressor</td>
<td></td>
<td>Stability</td>
<td>Dropping Out</td>
<td>Internships</td>
</tr>
<tr>
<td>Faith</td>
<td></td>
<td>Unprofessional</td>
<td>Graduate School</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>Lack Training</td>
<td>Advisors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fear</td>
<td>Planning</td>
<td>Lower Grades</td>
<td></td>
</tr>
<tr>
<td>Worry</td>
<td></td>
<td>Discipline</td>
<td>Extra Test Time</td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td></td>
<td></td>
<td>Less Study Time</td>
<td></td>
</tr>
<tr>
<td>Confusion</td>
<td></td>
<td>Peer Tutoring</td>
<td>Transcribe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regret</td>
<td></td>
<td>Read</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hard</td>
<td></td>
<td>Take Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determination</td>
<td></td>
<td>Self-Taught</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td></td>
<td>Record</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Class Load</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enrollment Issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Withdraw</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Additional Minors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teaching Method</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teaching Assistants</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Excess Hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Guidance</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Military</td>
<td>Gov. Assistance</td>
<td>Homelessness</td>
<td>Feedback</td>
</tr>
<tr>
<td>Medical Issues</td>
<td>Veteran Benefits</td>
<td>Food Stamp</td>
<td>Lack Shelter</td>
<td>Negative Experience</td>
</tr>
<tr>
<td>Health</td>
<td>Military</td>
<td>Housing</td>
<td>Homeless</td>
<td>Regressed</td>
</tr>
<tr>
<td>Uninsured</td>
<td></td>
<td>Referral Services</td>
<td>Lack Access</td>
<td>Not Helpful</td>
</tr>
<tr>
<td>Sickness</td>
<td></td>
<td></td>
<td>No Wi-Fi</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Distraction</td>
</tr>
<tr>
<td>Family Support</td>
<td>Travel Support</td>
<td>Money Support</td>
<td>Drive Support</td>
<td>Support Support</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Parent Support</td>
<td>Transportation</td>
<td>EBT</td>
<td>Motivation</td>
<td>Psychological Support</td>
</tr>
<tr>
<td>Relationships</td>
<td>Parking</td>
<td>Scholarships</td>
<td>Goals</td>
<td>Self Support</td>
</tr>
<tr>
<td>Sibling Support</td>
<td>Distance Grant</td>
<td>Encouragement</td>
<td>Spouse Support</td>
<td></td>
</tr>
<tr>
<td>Grandparent Support</td>
<td>Loans</td>
<td>Better Life</td>
<td>Friend Support</td>
<td></td>
</tr>
<tr>
<td>In-law Support</td>
<td>Finances</td>
<td>Make a Difference</td>
<td>Peer Support</td>
<td></td>
</tr>
<tr>
<td>Family Activities</td>
<td>GI Bill</td>
<td>New Direction</td>
<td>Pet Care Support</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>credit card</td>
<td>Bills</td>
<td>Cleaning Service Support</td>
<td>Transition Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effective Support</td>
<td>Lack Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peer Emotional Support</td>
<td>Online Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peer Groups</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Sacrifices</th>
<th>Awareness</th>
<th>Communication</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlimited Access</td>
<td>Sacrifices</td>
<td>Awareness</td>
<td>conversation</td>
<td>Comparison</td>
</tr>
<tr>
<td>Recommendations</td>
<td>Lack of Sleep</td>
<td>Communication</td>
<td>Nontraditional Students</td>
<td>STEM Vs Non-STEM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transparency</td>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>Identify</td>
<td>Transfer</td>
<td>UCF</td>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------</td>
<td>--------------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>Community College</td>
<td>Campus Resources</td>
<td>Discrimination</td>
<td></td>
</tr>
<tr>
<td>Caregiver</td>
<td>Transferred</td>
<td>Career Services</td>
<td>Stereotyped</td>
<td></td>
</tr>
<tr>
<td>Parenty</td>
<td></td>
<td>Library</td>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Parenting</td>
<td></td>
<td>Math Center</td>
<td>Acceptance</td>
<td></td>
</tr>
<tr>
<td>Veteran</td>
<td></td>
<td>Math Lab</td>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>Gay</td>
<td></td>
<td>SAS</td>
<td>Appearance</td>
<td></td>
</tr>
<tr>
<td>Smoker</td>
<td></td>
<td>CECS ODI</td>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td>UCF Cares</td>
<td>Sexual Identity</td>
<td></td>
</tr>
<tr>
<td>Pregnant</td>
<td></td>
<td>Greek Life</td>
<td>First Generation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SARC</td>
<td>International</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>VARC</td>
<td>Language Barrier</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MASS</td>
<td>Family Background</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Campus Involvement</td>
<td>Stigma</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knight Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regional Campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Care's Pantry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Central Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extracurricular Activities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G: LEVEL 4 ANALYSIS RESULTS
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Challenges</th>
<th>Support Systems</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles</td>
<td>Personal/Emotional Issues</td>
<td>Psychological</td>
<td>Motivation</td>
</tr>
<tr>
<td>Support Systems</td>
<td>Hard</td>
<td>Self</td>
<td>Goals</td>
</tr>
<tr>
<td></td>
<td>Not Helpful</td>
<td>Peer</td>
<td>Better Life</td>
</tr>
<tr>
<td></td>
<td>Improvement</td>
<td>Pet Care</td>
<td>Make a Difference</td>
</tr>
<tr>
<td></td>
<td>Central Location</td>
<td>Cleaning Service</td>
<td>Faith</td>
</tr>
<tr>
<td></td>
<td>Extracurricular Activities</td>
<td>Transition</td>
<td>Determination</td>
</tr>
<tr>
<td></td>
<td>Unlimited Access</td>
<td>Effective</td>
<td>Satisfaction</td>
</tr>
<tr>
<td></td>
<td>Recommendations</td>
<td>Lack</td>
<td>Graduate School</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transparency</td>
<td>Family</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Activities</td>
<td>Supervisor Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scheduling</td>
<td>Academic Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Development</td>
<td>Institutional Influence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>Financial Benefits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sacrifices</td>
<td>Coping Mechanism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Homeless</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparison</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Awareness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional Minors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Persistence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Class Difficulty</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Level Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degree Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caregiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Veteran</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


Carney-Crompton, S., & Tan, J. (2002). Support systems, psychological functioning,


Kasworm, C. (2003). Setting the stage: Adults in higher education. *New Directions for Student Services, 102*, 3-10.


students’ college choices. Washington, DC: Excelencia in Education.


Spence, J. T., & Hahn, E. D. (1997). The attitudes toward women scale and attitude change in college students. Psychology of Women Quarterly, 21(1), 17-34.


