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Language Proficiency Attainment and Mobility Among ELL Students

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A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

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by

Elizabeth Ayers Neill

December 2017

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Dr. Donald Good

Dr. Pamela Scott

Keywords: mobility, English Language Learners, schools, language

## ABSTRACT

### Language Proficiency Attainment and Mobility Among ELL Students

by

Elizabeth Ayers Neill

The impact student mobility has on academic achievement has been researched in the United States since the early 20<sup>th</sup> century (Goebel, 1978). Mobility for students is a risk factor often compounded by poverty, ELL students are at a higher risk of lower achievement. Educators face challenges in tracking records, monitoring, remediating, gap closing, and assisting students in transition periods. The data collected in this quantitative study was analyzed to determine the impact mobility has on English language learners and their attainment of a second language. This quantitative study examined the relationship between non-mobile and highly mobile ELL students in 1<sup>st</sup> through twelfth grade from one small school district. An analysis was utilized to identify the difference between male and female, mobile and nonmobile ELL students. The frequency of mobility was evaluated to identify the impact mobility has on language attainment. The findings propose that no significant relationship exists between mobility and language attainment.

DEDICATION

*For Bubba*

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## CHAPTER 1

### INTRODUCTION

#### *Background of the Problem*

High stakes accountability and reform are issues being addressed by educators across the nation; resulting in the examination of factors specifically impacting student achievement. Student mobility and its relationship to language proficiency attainment among English language learner (ELL) students is specific, current, and pertinent to the success of America's public schools (Staehr Fenner, & Kuhlman, 2012). According to United States Census Bureau (2014) there are 58 million students in kindergarten to twelfth grade, 13 million of those are ELL. The majority of ELL students in the educational system in the United States are Hispanic (Kim, 2011). Public school consist of approximately 14 percent ELL students (U.S. Department of Education, 2016). In the United States, the ELL population increased 18% between 2000 and 2012 (Horsford & Samson, 2013). August, McCardle, and Shanahan (2014) claim that the population of ELL students increased 32% between 2004 and 2014 when the overall school population grew only by 5%. The population of children from immigrant families in the United States is increasing more rapidly than any other population in the country (Garcia, Jensen, & Scribner, 2009).

This population increase has given way to a number of educational, economical, and societal concerns. The population of ELL students enrolling in individual states has had increases of up to 600% in 10 years causing a surge in judicial involvement on behalf of finance equity, meaning by 2013, only five states in the United States had not had lawsuits filed because of ELL

populations not being fairly served (Horsford & Samson, 2013). The number of school transitions is higher for ELL students than other school populations (Gossman, 2010). Obradović et al (2008) assert that the percentages of increase are difficult to track because of the high rates of mobility within this population. Highly mobile students have poor attendance rates when enrolled in k-12 school; thus, leading to incomplete standardized test data (Obradović et al. 2008). It is estimated that only 44% of mobile students complete their educational career in the same state where they began school. This is a direct result of high mobility and high drop-out rates, and causes difficulty in tracking data for this population of students (Kim, 2011).

High mobility is becoming so pervasive in the United States that researchers are beginning to categorize highly mobile students in the same group as homeless students (Obradović et al., 2008). More than 6 million students change schools every year (Sparks, 2016). While there is research on ELL populations and research on ELL language acquisition, there is limited research on how school transitions specifically impact ELL language proficiency acquisition.

Waters and Gerstein Pineau M. (2015) indicate that fully understanding the impact of school mobility on the ELL population is difficult as systematically and accurately tracking the population of immigrants is a challenge. The Department of Homeland Security (DHS), the U.S. State Department, and the Office of Immigration Statistics (OIS) are the responsible entities for collecting and tracking data on immigrants and immigrant integration. Individuals entering the country without applying or entering without being inspected are challenging to track (Waters et al., 2015). Burke (2016) explains that currently approximately 1.6 million students of school age are in the United States legally, while an estimated 875,000 are in the United States without legal authorization. These students living in the United States, regardless of citizenship status, are

required to attend a school until they turn 16, or older in some states. A systematic process for tracking data on mobile students is not in place (Burke, 2016).

Student mobility, according to the U.S. Government Accountability Office (2010), is one of many factors that has a negative impact on student achievement. The impact of student mobility is not limited to the student in transition (U.S. Government Accountability Office, 2010). Schools with highly mobile populations face lower attendance rates, lower math and reading test scores, higher retentions, and decreased graduation percentages as mobile students are less likely to be proficient in core academic subjects due to attendance issues and gaps in content knowledge (Black, 2006; Fiel, Haskins, & Turley, 2013; Howard, 2015).

Rhodes, (2005) explains that high school mobility impact school culture and teacher morale. High mobility limits incorporating rigorous lessons. Classroom instruction and rigor are interrupted by new students entering who require initial testing, remediation, and additional support to ease the transition. Rhodes also indicated that teachers are less likely to be satisfied in a school where high mobility rates result in low level academic lessons needing to be taught. Significant time is spent reviewing information for students who are behind on the curriculum from transferring schools. Consequently, teachers identify high student mobility as a cause for additional work hours necessary to help familiarize new students with curriculum and procedures (Rhodes, 2005).

Mobility is defined as transitioning from one school to another for a reason other than promotion of grade, and the population of students labeled as highly mobile accounts for 13 percent of students in kindergarten through eighth grade (Sparks, 2016). The United States General Accounting Office (GAO) (2010) indicated that more than 10 percent of schools had frequent mobility with the most transitions occurring in special education, low socioeconomic,

migrant, and ELL populations . Behavior problems and dropout rates increase during a school transition year like ninth grade (Sparks, 2016). ELL students are required to learn mandated curriculum as well as the English language. ELL students score 36 points lower than non-ELL students in reading, and specific causes beyond language barriers are unclear (Goldenberg, 2008).

Research on the impact of mobility on a child's education is limited. Few research-based recommendations are available for educators to assist this population of students (Newman, 1988). According to Newman (1988) mobile students and ELL students, regardless of mobility status, face many of the same challenges in school, including ill-aligned assessment measures, poor teacher, training, building conditions, varying policies, and curriculum discrepancies. Rumberger (2015) explains that unfortunately, school mobility is acknowledged as a characteristic of a group instead of a characteristic of an individual. However, schools undertaking purposeful reform measures do drastically decrease student mobility instances.

It is important to note that all mobility for children is not negative. Residential mobility can be a positive for families. If parents are seeking better schools, moving as a result of upward mobility or escaping dangerous living arrangements, students should benefit (Murphy, Brandy, & Moore, 2012).

#### *Purpose of the Study*

The purpose of this quantitative study was to identify the correlation between mobility and language proficiency attainment as measured by WIDA among ELL students in a small school district in Tennessee. WIDA is the assessment administered to all ELL students kindergarten through 12<sup>th</sup> grade and was initially named for the states in which it was administered: Wisconsin, Delaware, and Arkansas. Presently the test is called only WIDA. The

test is given annually and assesses four language domains: listening, writing, reading, and speaking. Students receive a 1.0-6.0 score (Wida.US, 2017). Specifically, this study is an investigation of how the frequency of school transitions impacts kindergarten to twelfth grade male and female English language learners' level of English proficiency by language domains: listening, speaking, reading, writing, oral language, literacy, and comprehension.

### *Research Questions*

This study was guided by the following research questions:

1. Is there a significant difference between the mean scores of mobile and non-mobile ELL students language proficiency attainment as measured by WIDA?
2. Is there a significant difference between the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measured by WIDA?
3. Is there a significant difference between the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measured by WIDA?
4. Is there a significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students?

### *Significance of the Study*

School mobility negatively impacts the schools with the high transition rates and negatively impacts the students in transition. Discipline consequences lead to suspensions and expulsions, while overcrowding and school choice also increase student mobility rates (Rumberger, 2003). Individually, students who change schools have a negative impact on the pace of their learning because of gaps in curriculum from one school to another and adjustment periods during transition. Student transitions are caused by a number of factors: limited

affordable housing, unstable family dynamics, school safety concerns, or too few academic resources (Kerbow, Azcoitia, Buell, 2003). High rates of mobility can compound learning gaps for ELL students who see significant gains in language acquisition when exposed to repetition and consistent, long-term immersion. ELL students are at-risk as they have limited exposure to educational resources when they are not in school (August et al., 2014).

This study focused on the relationship between ELL language acquisition and mobility rates. Differences between male and female and mobile and nonmobile students were examined. This study will enhance the current body of research related to student mobility and ELL. The timing of this study is significant as ELL populations continue to increase and certified ESL (English as a Second Language) teachers are the most in-demand in the state (Tennessee Department of Education Office of Research and Strategy, 2017). Additionally, this study will provide recommendations for both future research and practice that may make improvements in efforts to address how professionals can best improve learning for this population of students.

#### *Definitions of Terms*

Specific terminology is utilized to detail the conditions surrounding the methods, conditions and assessments in this educational study. Key words are defined below:

*Academic Achievement*- Knowledge and skills assessed by a standardized test and used to measure and report student data (Espinoza-Herold and González & Carriedo, 2017)

*Academic Language*- the language necessary to attain knowledge and used in classroom settings, which includes listening, reading and speaking (Scarcella, 2003)



*English Language Learners (ELL)* – students who speak a language other than English in their homes and who have not acquired sufficient academic English to perform ordinary classroom work in English (Ed.gov, 2017; Slama, 2012)

*Limited English Proficient (LEP)*- a classification for individual students who do not communicate in English as their primary language, these individuals have a limited English reading, writing and speaking skills (Cosentino de Cohen, Deterding, & Clewell, 2005)

*McKinney-Vento Homeless Education Improvements Assistance Act*- Federal legislation created to address situations facing homeless children and youth enrolling in, attending, and succeeding in U.S. public schools (Adams, 2017, Hallett, 2010; Obradović et al., 2009).

*Student mobility*-The movement of a student from one school to another school for reasons other than grade promotion (Rumberger, 2003; Alexander, Entwisle, & Dauber, 1996; Heinlein & Shinn, 2000). Frequency of mobility is defined as *less mobile* if students have moved 0-2 times. Mobility is defined as *high* if students have moved 3 or more times.

*WIDA*- the assessment administered to all ELL students, kindergarten through 12<sup>th</sup> grade. The test is given annually and assesses four language domains: listening, writing, reading, and speaking. Students receive a 1.0-6.0 score. The WIDA test was initially named for the states in which it was administered: Wisconsin, Delaware, and Arkansas, yet is now simply called WIDA (Wida.US, 2017)

*Zone of Proximal Development* – the variance between what a learner can do with assistance and what a learner can do without assistance (Gredler & Sheilds, 2004)

### *Delimitations*

The following delimitations are considered in this study.

1. The data in this study is limited to the ELL population from one small school system in Tennessee, which impacts the generalization of the study to greater populations.
2. Student data that was incomplete had to be removed because full educational careers could not be identified. By nature of the population, incomplete records were common.

### *Limitations*

The limitations listed are necessary to understanding the boundaries of the study.

1. There is no documentation explaining the reasoning for the mobility of students in this study. The data represent only frequency of moves for the student population but does not address whether the move was voluntary, involuntary, positive or negative for the families involved.
2. The number of students in this study decreases as the grade levels increase. There are 161 first grade students but only 6 in 12<sup>th</sup> grade for the total population. The sample is smaller because complete records of mobility could not be traced. Complete enrollment data for this population is limited. Therefore, few complete, individual kindergarten through twelfth grade education careers were identifiable.

### *Chapter Summary*

This study is divided into five chapters. Chapter 1 consists of an introduction, purpose of the study, significance of the study, research questions, definitions of terms, and delimitations of the study. Chapter 2 included a review of literature of the history of mobility, theoretical

foundations, causes of mobility, the impacts of mobility, ELL, economics and procedures to support highly mobile students. Chapter 3 details the population in the study and identifies the data analysis. Chapter 4 describes the findings of the research. Chapter 5 includes a summary and recommendations for further research.

## CHAPTER 2

### REVIEW OF THE RELATED LITERATURE

#### *Introduction*

The purpose of this chapter is to review literature related to school mobility and the academic impact it has on ELL language acquisition. The organizational headings for reviewing the related literature include: History of Mobility, Theoretical Foundations, Causes of Mobility, Impact of Mobility Overview, Academic Impact of Mobility, Psychological Impact of Mobility, Behavioral Impact of Mobility, ELL and Mobility, Economics, and Procedures to Support Students in Transition.

Student mobility is defined as the occurrence at which students change schools for any reason other than grade promotion (Song, 2015). Mobility is also termed “churn” and “transient” (Sparks, 2016, p.2). Historically, these disruptions during the school year are caused by a multitude of reasons including divorce, eviction, foster home relocation, and job changes (Song, 2015). Hutchings et al. (2013) claims that more than half of the students in the United States have moved residentially at least one time before their 10<sup>th</sup> birthday. Hutchings et al., asserts that the stress of a residential move for a child, is similar to the stress of job termination, chronic illness, or divorce for an adult. Students who are highly mobile are at higher risk for behavioral, psychological, and academic problems, with the largest deficits being graduation rates and achievement test scores (Rumberger, 2015).

## *History of Mobility*

Moving is classified as a normal experience for children in America (Murphy, Brandy, & Murphy, et al., 2012). Historically, immigrants have flocked to the United States for promises of a better life. The recorded history of mobility in the United States began as early as 1850 with federal censuses being taken between 1850-1870 and 1900-1910 (Ferrie, 2005). By 1910, 28 percent of all children in the United States were born of immigrant parents. This is a direct result of the immense immigration during the previous 100 years. These immigrants came from Europe and a small percentage (10 percent) from Canada (Hernandez, Denton, & Macartney, 2008). With immigration came language diversity. During the 18<sup>th</sup> and 19<sup>th</sup> centuries, a few states printed official documents in languages of minority populations; the federal government held to the English language. The education system in the country was not designed to teach multiple languages at the time (Ovando, 2003). No date identifies the origination of immigration in the United States. Individuals maintain records do suggest that language barriers among mobile and immigrant populations existed but were tolerated. During the 1700s to 1880s, the period Ovando (2003) identifies as *the Permissive Period* immigrants establishing homes in the United States territories maintained their native languages and cultures for the purposes of worship, communication, specifically newspapers, and for education.

Census records include information on individuals at two separate locations separated by one, two or three decades. These records were specific only to white men and their sons and recorded the locations of their occupation (Ferrie, 2005). The 1850 census began asking respondents to identify their place of birth. This questioning continued until 2000 on the census long form. Currently birthplace identification is asked on the Current Population Survey and the Survey of Income and Program Participation (Waters et al., 2015). According to Ferrie (2005)

past occupations recorded were labeled as white collar, unskilled, farmer, or skilled/semiskilled. These numbers identified the United States as a highly mobile nation compared to other countries recording mobility in the same manner, such as Finland, Sweden, and Canada. The same research claims that as of the 1970s, the United States was no longer a more mobile nation than others, falling below Finland, Sweden, and Canada. Again, the previous numbers represent occupational mobility and only those of white men and their male children. Intergenerational mobility is linked to public education and capital markets. Mobility in the United States reached a high at the end of the 19th century and beginning of the 20th century (Ferrie, 2005). World War I brought the United States away from its *laissez faire* attitude about plural languages and more toward monolingualism (Ovando, 2003). As capital markets improved and public education became more available intergenerational mobility increased (Ferrie, 2005). By the 1950s successful capital markets in the United States are credited with helping parents be more intentional in preparing for their children's future (Ferrie, 2005).

Because of the diversity among troops soldiers in World War II were the first to face requirements for multi-language based instruction in the United States. As Spanish and American Indians joined forces, the need for multi-language training rose. Military and global needs required foreign language and thus became urgent during the Cold War era (Ovando, 2003). However, little research was completed at the time focusing specifically on student mobility. An empirical study was conducted in 1963, but only investigates the mobile history of emotional disturbed children in military homes (Pedersen & Sullivan, 1964). During the 1980s, it is estimated that between 16 and 20 percent of the nation's population moved each year. By the 1990s, mobility slowed to approximately 17 percent of the population moving annually, the lowest percentage in 10 years (Alexander et al., 2007).

Goebel (1978) states, “Mobility is as American as apple pie and motherhood. Our nation was literally conceived in covered wagons and is now propagating itself in mobile homes” (p. 11). By the late 20<sup>th</sup> century, families averaged one move every five years, and individuals averaged 14 moves in their lifetime. Goebel (1978) explained that prior to World War II, public perceptions of mobility were positive. Post war attitudes changed as the media villainized mobility as having negative social and psychological implications. And, according to Goebel, research, at the time, identified only highly mobile populations: military and immigrant. Goebel claims that the scope was often limited to elementary education, and only short term effects were evaluated citing no impact on academic achievement of adolescence (p. 13). Investigations were not disaggregated by gender. To more meticulously examine student mobility and the impact it had on education, a population of 214 females and 168 males from a high school in the Midwest were evaluated. The 382 students were categorized into categories representing rates of mobility: non, moderate and high, based on the number of moves through preschool, elementary and high school. At the time this research took place, compulsory education ended at the age of 16; therefore, second semester sophomores were used to assess long-term academic success or failure, according to Goebel. Two tools were in place to evaluate success: grade point average determined short term academic success and the Iowa Test of Educational Development determined long term academic success (p. 12). The results indicate that at the time, mobility had little negative impact on academic performance. No significance was discovered between educational success and rate of mobility, unlike current data. Goebel explained that student who moved schools did report some impact on their educational outcome, even later in their school career. However, there was less impact on later educational outcomes based on the frequency of moves. At the completion of this research, recommendations for further and more in depth

investigations were suggested. (Goebel, 1978). This indicates that historically the impact mobility has on education is evolving.

Currently, 1.9 million students are classified as low income aged 9-11 move residentially each year (Herbers et al., 2012). Because mobility is a difficult phenomenon to track and the last census of population mobility was in 1973, initiatives are being created to measure and record social mobility in the United States. One initiative is the American Opportunity Study. The design of the AOS is to record solid data on transitions in the country's population for social science and economic reasons. Initiatives such as the AOS are partisan and have agendas beyond data collection (Grusky, Smeeding, & Snipp, 2014).

#### *Theoretical Foundations*

Stonequist and Park's 1928 theory characterizes those who are mobile as "marginal men." The Marginal Man theory identifies migrant behavior as that of being stuck between locations or cultures. This in-between impacts an individual's ability to determine his or her own identity. More recent ideas factor in the idea that immigrants have support or family at their new geographical location making for a less traumatic scenario.

Coleman (1988) uses an example of mobility to describe the characteristics of the human and social capital theories and how these theories relate to students in transition. Parents moved their large family to Jerusalem from Detroit for safety issues. The move occurred because of a stronger presence of human and social capital in Jerusalem than was offered in Detroit. The new location allowed more freedom as children are always protected by others in the community. Coleman indicated that this type of social norm is not available in all expanses of the United States. This "human capital is developed by changes in persons that bring about skills and



capabilities that make them able to act in new ways” (p. 100). Social capital, according to Coleman, occurs when there is a modification with the individuals who enable changes of importance to the community. Social capital relies on two essentials. The first is trustworthiness of the setting, meaning commitments will be fulfilled. The second essential is the scope of the commitments held (p. 102). This applies to school achievement in that the communities involved and the family background impacts the achievement. Coleman also identifies a link between human capital and high school drop-out rates, significantly increasing with increase in the number of siblings and decreasing with parents’ expectations for college. The effect of social capital on a child’s educational achievement can be measured by the number of school moves inasmuch as the associations binding social capital are damaged each time a residential move occurs (Coleman, 1988). Additionally, social capital theory and resiliency theory both claim to be the explanation for why some students are less negatively impacted by high mobility than others. These theories identify parental support and community relationships as necessary for academic success, two factors often absent in the lives of mobile students (Rhodes, 2005).

Mobility of any type, interrupts the process of building social networks. The least trauma is done in an immediate time frame when people move away from each other. Long-term trauma begins during the lengthy time frame before new relationships can be built. Specifically, for migrants, the time between leaving one home and becoming established in a new one creates a deficit in relationships, community and support (Jones, 1986).

Based on Fenzel’s 1989 research, Bronfenbrenner’s role theory claims that individuals hold roles regarding their age, gender, race, and socioeconomic status, relationships, and their position. Children’s roles may include friend, teammate, sister, brother, or student. Role theory is an approach to aid in understanding the stress on children in school transition. The role of the

student is important. Expectations for being student are put into place by teachers, administrators, classmates, and parents (Fenzel, 1989). These are called *role senders*. Fenzel (1989) stated, “Roles are potentially potent sources of stress because most roles, such as those involved with school and work, are found within institutions that function for the maintenance of society and that represent major investments for people” (p. 19). While student mobility, for the purpose of research, is defined as the movement of a student from one school to another school for reasons other than grade promotion, the theory of role strain was conceptualized exclusively regarding students moving into middle school (Rumberger, 2003). The types of role strain Fenzel (1989) identified as a result of the role theory are applicable to students transitioning at any level. These include: losing or gaining a role, being in an unwanted role, numerous relationships within a single role, and disparity between an individual and the nature of the responsibilities expected within the role. Role ambiguity can cause role strain for students. In a new school setting a student’s lack of understanding or misunderstanding about the responsibilities expected and uncertainty regarding the relationships in place can create role strain. At the same time role overload and role conflict emerge in new and unfamiliar situations (Fenzel, 1989).

The social constructivism theory warrants that the learning process calls for an operational, communal environment. This theory claims that the learning occurs as the learner connects experience with semantics and the thought process (Rhodes, 2005). Learning still transpires during school transitions. However, the learning occurs in reality and not as a direct result of educational instruction (Rhodes, 2008). Constructivists consider that information does not occur in seclusion, but is the outcome of the student’s collaboration with the setting (Rhodes, 2005). Instruction, real-world activities and tangible circumstances in the learning environment are necessary to advance discernment, organization, and cognitive skills of the learner. Acquiring

new academic content in classroom instruction primes the individual to cultivate higher mental tenacity. This is a result of formal collaboration with the teacher in a stable learning environment (Grendler & Shields, 2004; Rhodes, 2005).

Rhodes (2005) explains the significance of transition shock, which was first identified by Bennett. Transition shock is a theory that includes four distinct stages. Rhodes identifies *cognitive inconsistency* as a period of hurt and confusion that follows a transformation to an individual's accustomed environment significant enough to require a period of adjustment. Related to culture shock, both are situations that highly mobile students are prone to experience. Bennet claims that students, who are displaced and moved to unaccustomed settings, transition through each of the four stages of cognitive inconsistency before they are fully able to comprehend new ideas. This only occurs after transitioning through the last stage in the theory (Rhodes, 2005).

Dewey (2008) said, "Education is not an affair of telling and being told, but rather an active and constructive process" (p. 52). This notion holds true to the principles of social constructivism in that students learn most effectively in stable, experience rich social learning environments. Students must be present and active to learn. This may be utilized as a framework for understanding why non-mobile students have higher academic success rates than highly mobile students (Dewey, 2008).

Vygotsky's educational model, as cited by Grendler and Shileds (2004), of the zone of proximal development (ZPD) claims that learning also occurs through imitation. A child will imitate a teacher's or parent's processes and roles, such as that of being a fervent reader (as cited by Grendler & Shields, 2004).

Based on learning theories that identify experience and stability as necessities to learning, mobile students face penalties in their academic careers. First, Bruner identifies *building blocks* in learning, which would face interruption and gaps because of residential moves and school transition (Rhodes, 2005). Social control theory can be used to explain that residential moves will have negative impacts on children as elements of socialization are severed. For example, ties between a child and school, peers, teams, church, and family are severed in a long-distance move. This break in commitment leaves the mobile child with behaviors of anomie (Sampson & Laub, 1995). Adolescent relationships with peers shape behaviors. Ethnographical studies prove the importance of consistent social relationships, a scenario disrupted by residential moves (South, & Haynie, 2004).

As scaffolding and reciprocal teaching are ongoing strategies commonly used through elementary grades, mobile students may benefit from these strategies. However, the nature of mobility may keep students from experiencing the repetition of content and experiences as they become lost in the transition (Puntambekar, 2009; Rhodes, 2005). Students with residential and school mobility gain a strong learning experience through the moving process; however, this shift in role pulls the child's attention to the relocation and away from the academic learning experience. Essentially, Maslow's hierarchy of needs becomes inverted as a highly mobile child is expected to execute more complex reasoning skills prior to her basic needs for security and community have been met (Fenzel, 1989; Rhodes, 2005).

### *Causes of Mobility*

Mobility is defined by Paredes (1993) as, "the rate at which students move from one school community to another" yet often the reason behind the move is not identified. Mobility is difficult to measure. Parameters like location, frequency, cause and distance need to be evaluated

(Heinlein & Shinn, 2000). In 2007, the United States was identified as having a high population mobility rate globally. As the overall population is moving, so are students (Titus, 2007). Individuals who are most likely to move are families from low socioeconomic situations, divorced or never married, those who rent, and individuals from poor rural and urban areas (Allen & Vacca, 2010). One-fifth of the population in the country moves every year, meaning that it is rare for a student to begin their education in kindergarten and then graduate high school in the same school district or state (Heinlein & Shinn, 2000; Humke & Schaefer, 1995; Kim, 2011; Titus, 2007). Eighteen percent of students move from one home to another during the school year. These residential moves account for 60% of student mobility; the remaining 40% of student transitions are due to other factors beyond residential moves. A number of factors lead to students' school transitions: divorce, mission work, homelessness, agricultural migration, parent and guardian employment, foster care, military, natural disasters (Hanushek, Kain, & Rivkin, 2004; Marchant & Medway, 1987; Titus, 2007). Furthermore, Rhodes (2008) qualitative study detailing open ended interviews with eight highly mobile students offers explanations for the school moves. Students identify residential eviction, domestic violence, and the search for better educational opportunities as reasons for the school moves. A majority of school moves (58%) were related to changes in residence (Kerbow et al, 2003). From the same cohort of kindergarten students who were tracked from 1998 to 2007, parents identified financial reasons (job loss), family problems, and the need for safer, higher-achieving schools as reasoning for residential moves. Families attempting to flee dangerous neighborhoods, robberies, and gang violence, move homes and school out of a necessity for safety. Specific concerns with school safety and lack of academic resources account for 42% of transitions. More than 80% of these school transitions are within the same district in Chicago (Kerbow et al., 2003). Also, from the same

research cohort of kindergarten students, highly mobile student populations live in homes not owned by the family. Frequently, mobile students rent their homes or live with relatives. Kerbow et al, (2003) also states that thirty-nine percent of highly mobile students are from families who do not own their own home. More specifically, if a family was unable to pay rent, they would move from one rental property to another rental property that offered a month of no rent; thus, creating a cycle of residential and school mobility. Kerbow et al., identifies that more than one family sharing a single -family dwelling caused students to transition schools. Custody arrangements after parents' divorce were also identified as catalysts for students to transition from one school to another (Kerbow et al., 2003).

A 2010 publication the United States General Accounting Office (GAO) Report to Congressional Requestors also reported that social services are often required to remove children from their biological parents and place them in foster care resulting in more student mobility (U.S Government Accountability Office, 2010).

Durante, Fisher, Matthews, Nakagawa, and Stafford (2002) state, "Divorce, separation, or other changes in the family constellation can also precipitate changes in residence and consequently, changes in school. School transfers may also occur when a family moves as a result of a parent/guardian finding work in another district. Even upward mobility, such as homeownership or movement to a higher socioeconomic status, affects the continuity of a student's educational experience" (p. 319).

Hartman (2006) identifies other causes of student mobility such as discipline issues in school, which leads to expulsions. And high teacher turnover and overcrowding have both been linked to student mobility. Also, parents who have a negative opinion of their student's school can lead to the decision to move their child from a school. Yet, residential moves caused by job

changes, loss of income and even *code enforcement* still account for the majority of student mobility (Hartman, 2006).

The cause of the transition has a direct relationship to the speed in which a student can adjust. For students who move schools because parents are seeking better educational experiences and satisfaction have a shorter period of adjustment. Those children who are moving because of negative situations suffer more disruption and have a longer adjustment period (Rhodes, 2008). Coping strategies, when applied safely and positively can shorten a student's adjustment period (Kirkpatrick & Lash, 1994).

Foster children are often the embodiment of the negative aspects of school mobility. When a foster student arrives at a new school, they, like highly mobile students, face incorrect placement, delayed registration, and undesirable perceptions by school officials. If a foster child brings a blemished academic and behavior record, perceptions continue to diminish and beginning with a clean slate is no longer possible (Allen & Vacca, 2010).

School closures create school mobility for students but are rarely identified in the data as a cause, whereas divorce, eviction and job loss/promotion are. Students who move due to school closures are calculated into the total number of school moves although the cause is rarely noted (Rumberger, 2015).

Limited current research exists investigating the specific effect of mobility on military children and academic success prior to September 11<sup>th</sup>, Operation Iraqi Freedom and Operation Enduring Freedom (Drummet, Coleman, & Cable, 2003). Post 9-11 reports indicate that more than 60 percent of active military members have family obligations. Unlike in decades past when the military was mostly comprised of single males. This equates to high populations of students

moving nationally and internationally as a result of military relocation. Family life educators are in place to assist military families with the stressors surrounding relocations; although reports show military families unsatisfied with the services and its outcomes (Drummet, et al., 2003). Current research focuses more on the psychological and behavioral impacts of having a deployed parent and less on mobility and academic achievement (Lester et al., 2014). Research evaluating how military families function with relocation and deployments coined the term *pileup of stressors* to indicate how the strains of military life and family responsibilities compound each other (Blaisure et al., 2016).

### *Impact of Mobility Overview*

In terms of life stress, residential mobility is categorized alongside divorce, job termination and illness. Over half of the students in America have moved homes at least once before they turn 10 (Hutchings et al., 2013). Students who are highly mobile are often categorized with homeless students. Residential mobility is now considered a barrier faced by homeless students. Mobility is being categorized alongside exposure to illegal substances and violence in terms of the dangers each can cause to children and families (Hallett, 2010). Mobility is calculated by the number of school moves a student has during the academic year. A child understands the difference in a school move and a residential move, although the research on student mobility does not always differentiate between the two (Alexander et al., 1996). For the purposes of research, student mobility is also calculated over a span of several years (Heinlein, & Shinn, 2000). Students classified as highly mobile are at an increased risk of negative experiences in social situations, and lower academic success compared to those students who are less mobile (Allen & Vacca, 2010). High mobility among student populations has a negative impact on schools, as well as the students in transition. This negative impact is not limited to



academics (Titus, 2007). And the negative impact is not limited to the student. The classroom and the school are both impacted (Hanushek et al., 2004). Mobility is directly related to lower academic success when prior experiences are not taken into consideration as contributing factors to the poor academic outcomes. Meaning, mobility is frequently blamed for poor academic success when other contributing factors such as poverty are not considered (Heinlein & Shinn, 2000). Students are also faced with social and psychological problems. Issues occur when students change schools because different schools, districts, and states have different academic rigor, standards and standardized testing. Class credits, graduation requirements, grading scales, and record keeping are different across states, causing students to face gaps in learning, grades, and graduation requirements (Titus, 2007). A student interviewed in a qualitative study regarding school mobility stated, “A lot of times when you transfer to a different school, sometimes they can’t match your courses, and sometimes they can, and even if they do, they’re in different places than you were, like in English, they’re reading a different book, or they’ve read three and you’ve only read two. And you have to catch up to survive. Like now, I have to do the work that they’re doing now, and do the work they did before I came” (Rhodes, 2008, p. 121). Classroom pace and rigor are negatively impacted as a new student transitions in requiring additional time and resources (Hartman, 2006).

Male students between the ages of six and 14 and who are mobile, are less insistent at completing assigned tasks, and mobile females in the same age range had more behavior issues than their non-mobile classmates (Humke & Schaefer, 1995). Transient students identify with each other and form minimal relationships. These students integrate with peer groups who do not value education or set high goals for themselves. A change in educational setting breaks the connections between students and teachers, students and peers, and children and parents (South,

Haynie, & Bose, 2007). High school students who are mobile face lower graduation rates (Hartman, 2006).

Violent student behavior is a negative result of mobility. These violent behavior issues are higher with students who move frequently compared to students who do not. The impact is long term. Higher rates of elementary school mobility have been linked to a 20 percent increase in violent behavior during the student's high school career. High rates of mobility impact students' eligibility and ability to participate in extracurricular activities. Students with higher rates of school mobility have increased numbers of health and nutrition problems as well (Rumberger, 2003).

Kerbow et al. (2003) identified a cohort of kindergarten students who were tracked from 1998 to 2007 by the Consortium on Chicago School Research. Thirteen percent of students changed schools four times or more, categorizing them as highly mobile. Compared to students who are categorized as less mobile, two or fewer moves, the differences in academic performance, behavior and psychological health are significant. Significant populations of the highly mobile students came from minority, single parent, low socioeconomic homes and received assistance from the Temporary Assistance for Needy Families (TANF) and the National School Lunch Program (NSLP.) Twenty-six percent of these students fell below the national poverty line (Kerbow et al., 2003). Because of income, parents often have limited control over the school mobility their child faces. They do have control over the level of participation they put into their child's academic and extracurricular activities. However, parents do not understand the impact mobility has on their child from kindergarten to second grade (Rhodes, 2005).

Within the cohort, a disproportionately high percentage of students classified as highly mobile were African-American, approximately 23 percent. Similarly, the 2010 publication the

United States General Accounting Office (GAO) Report to Congressional Requestors claims that schools with high mobile populations have higher rates of ELL students, attendance issues and special education services. The schools with 11-25 percent of students in eighth grade being served by special education had 50 percent higher mobility rates (U.S. Government Accountability Office, 2010).

Parents in highly mobile situations are less involved in academic and extracurricular lives of children (South et al., 2007). Relationships normally built within communities, schools, peers, and social networks cannot fully bind when consistency in schools and neighborhoods is not developed and maintained. South et al. (2008) explains that this is identified by an absence in solid relationships between schools and parents, parents and parents, students and schools, and students and parents. Rhodes (2008) shared a student interview regarding school moves. The female ninth grader noted the grief she felt when leaving friends and when other friends moved as well. She said, "People would always be moving there, we'd all be sad. One boy, we was crying, we all got close, he left unexpectedly, he didn't know he was going to leave. It was sad for me, I claimed him as my cousin. It took us a long time to get him to talk to us. Most of the people were crying" (p.116). Mobile children age six to 14, report having more difficulty making new friends than their non-mobile counterparts. Longing for old friends and creating new relationships caused more emotional strain for mobile teenagers than younger children (Humke & Schaefer, 1995).

Demographically, individuals who are more mobile are significantly younger than non-mobile individuals and are typically immigrants (South et al., 2007). The parents of mobile students have a lower level of education than less mobile parents and are likely to receive government assistance (South et al., 2007). Students who live in poverty share common

characteristics with students who are homeless or highly mobile (HHM.) Both populations are frequently from a minority background and have minimal access to resources and support that assist with mental health and nutrition education (Herbers et al., 2012).

It is very difficult to accurately record the number of mobile students moving in one school year (Rhodes, 2005). Highly mobile students frequently do not graduate from the same district from which they began because of mobility (Kim, 2011). Districts employ individuals who track mobility by the number of students who are in attendance in mid-October and mid-May. This data is limited as students most frequently transfer at the beginning of the school years and at the end of the school year. Tracking in October and May makes mobility rates appear much lower than they actually are (Rhodes, 2005).

This model represents the flow of mobility as it is organized for study of the phenomenon. Durante, et al. (2002) explains the cycle of mobility framework by saying:

Accordingly, student mobility may be examined within the context of (a) *antecedents* or *sources* contributing to student movement in and out of schools/districts, (b) the effects of student movement on *school processes* (e.g. administrative and instructional activity), and (c) the *consequences* of inconsistent and unstable educational experiences for student development, learning, and academic performance. We call this framework the cycle of mobility because it depicts how the causes and effects of mobility are linked, see Table 1 (p. 319).

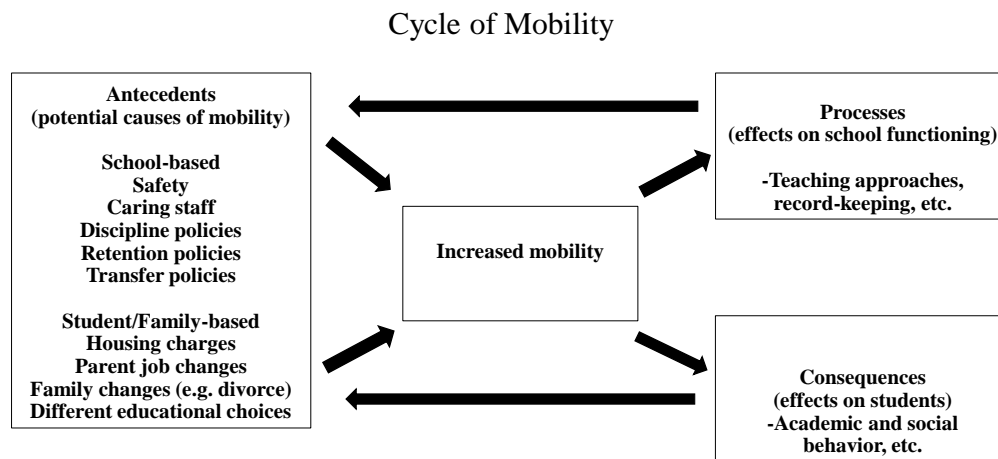


Figure 1: *Cycle of Mobility*

### *Academic Impact of Mobility*

The impact residential mobility has on students has been studied more frequently than the impact of school mobility on students. Often it is assumed the two are the same. However, school moves do not always occur because of residential mobility (Hutchings et al., 2013). Students who are considered highly mobile, three or more school moves between first and sixth grade, score one academic year behind demographically similar, non-mobile students (Kerbow et al., 2003). Students who have moved more than twice before entering third grade have lower math and reading test scores in third grade than their peers who were not mobile (Heinlein & Shinn, 2000). This statistic does not differ for highly mobile students who fall into a higher socioeconomic tier, or who have stronger family dynamics. High mobility rates impact students' academic progress in a negative manner (Alexander et al., 1996; Heinlein & Shinn, 2000; Kerbow et al., 2003). High mobility in public education not only has negative impacts on the

mobile student, but the impacts are felt by the classroom and the collective school (Hanushek et al, 2004). Schools with high mobility rates are less likely to have instructors who can design lessons for individual learning. Because a majority of time is spent focused on reteaching lessons and remediating for new and transfer students, minimal time remains for individualizing lessons for remaining students (Rothstein, 2014). Data reporting the negative impact on academic achievement related to student mobility is often unbalanced because students' previous situations and histories are not factored into the results. School mobility is a focus, and factors such as poverty and race are not considered (Rumberger, 2003). A direct relationship between student mobility and lower academic scores occurs when controls for previous academic achievement do not exist (Heinlein & Shinn, 2000). While studies measuring drop-out rates, behavior issues, grades, test scores and retentions have been completed, the research does not represent all districts or students (Rumberger, 2003). A 1993 analysis of 1,915 students between the ages of six and 17 showed that 23 percent of the students who were mobile had failed a grade compared to the 12 percent of non-mobile students who had failed a grade (Wood, Halfon, Scarlata, Newacheck, & Nessim, 1993). High mobility negatively impacts high school graduation rates for both mobile and non-mobile students because human resources become limited in highly mobile communities (Kim, 2011; South et al., 2007). Factors contributing to the number of school transitions vary from student to student and is not applicable to all situations. Because of this limitation, evidence proves that mobility negatively impacts student achievement in certain situations. When background information is not taken into consideration, student mobility alone has negative consequences on student achievement (Rumberger, 2003).

A mobile student transitioning from one school to another during the school year has 10 percent less gains than expected (Kerbow et al., 2003). Transitioning schools and residences

causes more strain on a younger child, third grade and younger, than in higher grades due to educational foundations not firmly established (Alexander et al.,1996). If a child transitions between school years, the decrease in gains is less than 10 percent. This decrease can be corrected if the students remains in the same school for the following school year. This small decrease is reserved for students who only move one time. One school move does have an immediate impact on academic achievement and can be measured a year later on standardized tests (Kerbow et al., 2003). The influx of highly mobile students from one school year to the next have a total impact on test score. Especially with mobile ELL students, a school's test scores rise and fall depending on the populations being tested and the percentage of mobility (Crawford, 2004).

Kerbow et al. (2003) explains that the negative impact on students who move more frequently has a cumulative impact. Students with high mobility demonstrate significantly lower math skill attainment than non-mobile students. This is due to the scaffolding built into logical mathematics curriculum which mobile students often miss (Kerbow et al., 2003). A negative pattern of lower academic success begins in third grade for mobile students. Those students who have two school moves prior to third grade score lower in reading and math than their peers who did not move. This pattern continues in sixth grade (Heinlein & Shinn, 2000). Heinlein and Shinn (2000) state, "The odds of being overage by grade six were over twice as high for children with three moves before grade three as for children with no moves before grade three" (p. 355). Pace and exposure are key factors to learning. Highly mobile students see gaps in the pace of curriculum and are limited in exposure as a direct result of their mobility. Even students who could transition from one school to another and join the curriculum and pace at the exact location as the previous school, still face deficits because of the lack of stability and routines within the

body of the school (Kerbow et al., 2003). The negative impact on a student's academic success can be decreased early in his or her education if educators are able to evaluate and remediate gaps in knowledge resulting from transitions (Heinlein & Shinn, 2000).

Rumberger (2003) analyzed the specific impact of mobility on student achievement in all grade levels. Factors including family background are considered when evaluating the impact of mobility on student achievement, yet the exact impact is unclear. However, student mobility early in a child's education dictates more of a pattern on negative success than does later mobility (Heinlein & Shinn, 2000). Furthermore, Rumberger (2003) reports that three or more moves predicts that students would face grade retention. This specific study did not include controls for previous school achievements and failures, but did allow for the student's demographic factors. Students who move as a result of migration and low socioeconomic standing are less likely to show academic success due to a lack of community relationships and roots (Hanushek et al., 2003). A second study utilizing the same data identified only one move as having a negative impact on school performance (Rumberger, 2003). However, this finding was only calculated for students living with one parent, not children in two parent homes. An additional study identifying 30,000 mobile sixth, seventh, and eighth graders in Chicago showed students scoring lower on standardized tests even after controlling for background data and previous test scores. Often background information and factors including poverty, stability of the family, marital status of parents, and educational background of parents is not included in data findings for highly mobile students (Rumberger, 2003).

In a study analyzing student mobility in Chicago elementary schools Kerbow et al. (2003) found that after three years, only 50 percent of the students were still enrolled in the same school. And in some cases, only one-third of students were in the same school after the three-year period



(Kerbow et al., 2003). Each year, approximately 20 percent of the United States population moves residentially (Heinlein & Shinn, 2000). Because of this mobility, the responsibility to transition new students into the classroom falls on the classroom teacher. Few schools have a system in place to assist new students into a new school. The pace of the curriculum is frequently interrupted when a new student arrives because teachers spend time reviewing previous information to help new students attempt to close gaps that may or may not exist (Kerbow et al., 2003). School breaks are scheduled to align with curriculum shifts, transitions in the school year created by a family's schedule or needs does not align to curriculum schedules and thus impacts the student's academic pacing (Alexander et al., 1996). Rhodes (2008) shared a student interview from a qualitative study regarding the impact of school mobility. The ninth grade student claimed she moved because she was not learning anything new. She said, "I left Harbor [charter school] because I wasn't learning nothing. Like they don't teach you what you need to know, they was showing people what I already knew. Therefore, I wasn't learning nothing new" (p. 116). In the Chicago elementary schools identified in the study by Kerbow et al. (2003), a gap in the math curriculum had developed by second grade because of the mobility of students in and out of the classroom. The gap is developed in high mobility schools because of time spent with students who transition. This gap is equivalent to two grade levels. Thus the impact of mobility on non-mobile students is clear (Kerbow et al., 2003).

Highly mobile students participate in fewer extracurricular activities limiting social interactions with peers. This lack of social experience, coupled with the demands of quickly obtaining the norms of a new school culture, and academic pacing, leads to students having lower academic goals or aspirations. Because an attachment is not built between the students and

the school, highly mobile students have poorer educational outcomes than their less mobile peers (South et al., 2007).

Additional moves continue to sever more relationships. Students, regardless of mobility, who are joined in social groups with highly mobile students have fewer expectations for college attendance and lower grade point averages. Thus showing a negative impact of student mobility on non-mobile students. South et al. (2007) report that mobile students and their parents both report having a lower quality relationships with each other. Parents of highly mobile students claim to participate less in their child's academic life, school, and their community than those parents on less mobile children. Mobile students are less likely to recognize and use social support systems in place to assist with school transitions, and are less likely to benefit from services (South et al., 2007). However, students who transition frequently have learned to identify which adults and peers are sympathetic to their specific situation, yet do not necessarily seek the help needed (Rhodes, 2008). Each of these factors leads to a higher chance of dropping out of high school. Mobile students have a drop-out rate that is twice as high as non-mobile students. Mobile female students are at a slightly lower risk of dropping out of high school than males; however, immigrant students are less likely to drop-out of high schools as are African American students regardless of gender. The significance between drop-out rates and student mobility is applied to older adolescents rather than younger students (South et al., 2007).

Of the 160,000 students in the Kansas City, Missouri, metropolitan area, one in every five of those students had moved and 6,000 of those students moved schools two times or more ("Student Mobility Negatively Linked," 2015.) These students are 60 percent less likely to score in the proficient range on communication, arts, and math standardized tests than those students who had not moved. Students miss four to six days of academic instruction, on average, for each

move. This geographical area consists of rural, suburban, and urban areas with mixed ethnic and economic populations. Taylor Knight, executive director of KC-AERC, stated, “This is a microcosm for the rest of the nation” (“Student Mobility Negatively Linked,” 2015, p. 2).

Factors including socioeconomic status, race, gender, family educational background, and special needs impact students’ educational achievement. Mobility has negative impacts on students’ educational achievement. Evidence shows mobility negatively impacting students’ academic gains aside from these separate factors (U.S. Government Accountability Office, 2010).

### *Psychological Impact of Mobility*

Elkin’s 2014 Child Stress Scale can be used to categorize stress levels associated with major life events. Mobile students experience major life stress when making adjustments to new friends, new schools, residences and communities (Humke & Schaefer, 1995). For a child, the stress of moving has been compared to the same emotions felt experiencing grief and death (Allan & Gullotta, 1983) The 2010 publication the United States General Accounting Office (GAO) Report to Congressional Requestors Research reports that evaluations of the impact student mobility has on a student’s emotional health is inconclusive (U.S. Government Accountability Office, 2010). The Coddington Life Events Record states that changing schools has the same life stress on a child as having a parent incarcerated or having a parent hospitalized for a life-threatening illness (Alexander et al., 1996). Yet, as a result of Obradovic’s 2008 research into the impact of academic success in homeless and highly mobile students in Minneapolis, new information regarding stress, executive brain functions, and brain development emerged. Obradovic et al refer to executive brain functions as *tools of the mind* (p. 5). Executive brain functions develop in young children between the ages of three and seven and are crucial for

a child's success in being academically prepared for starting school. A student's ability to function within a classroom by following teacher directions, disregard classroom distractions, and maintain the flexibility to transition through a school day are all self-regulating skills controlled by executive brain function. Two important details emerged from the research of Obradovic et al (2008) regarding executive functions. First, stress early in the development of a child's brain, can interfere with the development of executive brain functions, and second, the successful development and use of executive brain functions are extremely important to at-risk students. Obradovic et al., (2008) identifies three incidents deemed as stressful outside of being homeless: witnessing violence, placement in foster care, and an incarcerated parent. A final finding shows that preschool attendance is effective in helping students develop the executive brain skills necessary for academic success throughout their school careers (p. 19).

Petit and McClanahan (2003) define social capital as, "relations of commitment and trust between parents and other adults in their communities, which, like economic or human capital, may be used to foster the skills and capabilities of children (p. 634). Before identifying all residential moves as having negative impacts on a child's social capital, the dynamics of the move must be evaluated. Conversely, residential moves, in certain situations, may offer children more opportunities to develop relationships and build their sense of community because of an increase in resources being offered in the new residential situation (Petit and McClanahan, 2003). Additionally, mobility might not have the negative impact on a student if the family situation is improved in the new situation. However, positive moves are less frequent (Pittman & Bowen, 1994). Highly mobile students do develop coping strategies and they can develop into what Rhodes (2008) identifies as "resilience, inner strength, and insight from surviving and processing these experiences" (p. 122). However, a child moving to a higher socioeconomic

situation (10 percent or less poverty), may be impacted negatively if the family does not have the finances to participate, are discriminated against, or does not have the established social skills necessary to bond with others. Or, a child moving to a safer neighborhood can promote relationships as the family eliminates fear and opens themselves to new relationships because of new security in a safer neighborhood (Petit & McClanahan, 2003). Families moving to new and better situations may negate the positive impact if they are highly mobile. Regardless of moving to a more stable environment, the simple stress of a potential additional move may remove the helpful impact (Pittman & Bowen, 1994.)

Residential mobility disunites relationships during adolescent development. Student mobility impacts a child's self-esteem. The pressure of making new friends, and identifying and understanding new school procedures, increases the stress on a student's psychosocial health. Residential mobility has a significant negative impact on a student's emotional wellness with higher rates of depression and self-denigration, leading to feelings of isolation from both family systems and social support systems in place (South et al., 2007). Rhodes (2008) shared an interview with a small group of high school transfer students. The students spoke candidly regarding the psychological harm and predictions for future school moves. Two of the students directly addressed the stress of moving and the difficulty trying to focus in a new school setting, stating, "It's just too much for a kid to adsorb." The cousin of this student was asked what predicted a child would act like who moved schools frequently. He stated, "He's not going to be open, he won't communicate as well, and he wouldn't have no friends" (Rhodes, p. 121, 2008).

### *Behavioral Impact of Mobility*

Children are rarely involved with the decisions being made regarding a residential move. This lack of involvement leads to feelings of being alienated and frustration combined with

helplessness (Dewitt, 1998). Children frequently turn to aberrant peers as a result of their parent's fixation and focus on the strains of a residential move (Sampson & Laub, 1993). This lack of consistency in parental supervision damages the relationship between the child and parent often driving the child into unsafe relationships with deviant peers, and these relationships are sought out as a desire for acceptance (Sampson & Laub, 1993). The relationships that are in place for the mobile student lack depth, are not as satisfying, and not favorable to construct strong social relationships necessary to adolescents (South & Haynie, 2004).

South et al. (2007) states that students who frequently move schools do not have strong relationships with peers. Thus, students with limited or no social network are more likely to participate in delinquent behavior. These same students make poorer grades and spend less time on academic work. Those mobile students who do form friendships report that they have fewer special friendships and limited personal intimacy with the friendships in place (South et al., 2007). The 2010 publication the United States General Accounting Office (GAO) Report to Congressional Requestors claims that students transitioning to new schools who do not feel as if they belong, often exhibit behaviors which inhibit academic growth such as: poor attendance, class disruptions, and dropping out of school all together. The same report states that students who anticipate additional future school moves are reported to behave in a detached manner (U.S. Government Accountability Office, 2010). Parents of students who frequently change schools claim social problems exist as a result of the schools moves (Rhodes, 2005). These behavior problems range from violence and aggression to being silent and reserved. Rhodes also explains that in order to make friends and belong to social circles, students frequently engage in fights in order to belong as opposed to being alone. Students who expect to move schools again, frequently act in a defiant manner and resist upcoming moves (Rhodes, 2005).

A positive correlation exists between students who are highly mobile and drug use. This correlation is reported to exist for all age groups (Flewelling, Ennett, Rachal, & Theisen, 1993). An analysis using the Accelerated Failure Model (AFT) measured a “lifetime prevalence estimate of drug use and drug related problems” measured by residential moves of children prior to the age of 16 identified a correlation in drug abuse and mobility. As the number of childhood moves increased, so did the instances of drug abuse. Additionally, individuals faced residential moves have a significantly higher likelihood of using unlawful drugs at an early age as compared to their counterparts who did not move. This increase is more likely in males than in females (Dewit, 1998.)

Regardless of ethnicity, mobile students are forthcoming in sharing their varied experiences of attending new schools (Rhodes, 2005). Given a survey, students are open regarding the academic rigor from one school to the next, how it compares in the levels of difficulty, and how far behind or ahead they feel. Rhodes explains that students identified and shared their perspectives of the school’s climate, including discipline, societal norms, and level of care and support from teachers. Specifically, these highly mobile students are cognizant of how they are introduced to the building and schedule. They reported on how they are escorted to classes and by whom, student or faculty, and they reported to what degree they are greeted by the teacher and what activities are in place to ease them into meeting new students on their first day. According to Rhodes, students also report a mixture of emotions, including feelings of grief for friends they have left at previous schools. Additionally, new students report feeling as they need to prove themselves by being tough, and this is often displayed through violent behavior (Rhodes, 2005).

Wood et al., explains that high mobility among students six through 17 has a link to behavioral dysfunction. Based on the Achenbach Behavioral Chart, 18 percent of highly mobile students had four or more behavioral problems. Only seven percent of the non-mobile students had four or more behavioral problems (Wood et al., 1993).

Behaviorally, mobile students frequently develop coping strategies to help them ease into the social realm of a new school (Rhodes, 2005). Interestingly, female students report coping strategies to be more beneficial in easing transitions than male students (Donohue & Gullotta, 1983). One mobile, female student reported that she would immediately identify the one student in the class who appeared to be friendless or a loner and would cling to this individual in order to have someone with which to communicate so as not to be completely alone from the beginning. This beginning relationship is then used to build more relationships and learn more information about others so as to determine with whom to make relationships with from there (Rhodes, 2005).

### *ELL and Mobility*

Of the 50 million students in the United States, ELL students make up 4.5 million of that population (Horsford & Sampson, 2013). This labels one in 10 students as ELL (Horsford & Sampson, 2013). Almost one in five students, who are elementary aged in the United States speak a language other than English in their homes. Approximately 66 percent of students in kindergarten through sixth grade are LEP. The last decade of the 20th century experienced a 104 percent increase in LEP enrollment while non ELL enrollment only increased 13 percent (Callahan, 2005). There is criticism surrounding the label ELL because it implies that these students have only the characteristic of learning English and little more (Escamilla, & Hopewell, 2010). As early as 2000, an analysis of data from Schools and Staffing Surveys (SASS) identifies



that the majority of elementary students who were labeled as limited English proficiency (LEP) were enrolled in only a small number of schools. This equated to approximately 70 percent of the LEP students in the United States being enrolled in only 10 percent of the nation's schools (Cosentino de Cohen et al., 2005). The fastest growing minority in the country is children born to immigrant parents, which currently makes up approximately 6 percent of the United States student population, and the fastest population growth is at the high school level (Slama, 2012). In the 10-year period between 1993 and 2003, the average population of ELL students grew from 2.8 million to 4 million, an increase of 50 percent. Some states saw increases of up to 200 percent (Cosentino de Cohen et al., 2005). Collier and Thomas (2002) predicted that ELL students will make up 40 percent of the school populations in the United States by the 2030s.

Student mobility fluctuates based on race and socioeconomic status (Horsford & Sampson, 2013). Two-thirds of ELL students live below the poverty line (Avita & Lee, 2008). Students in kindergarten who speak Spanish fall one standard deviation below their classmates in regards to maternal education attainment and socioeconomic status (Garcia et al., 2009). Rumberger (2003) claimed that 41 percent of Hispanic American student populations moved over a two-year period. Minority student populations, specifically ELL students, have the highest rate of mobility in educational institutions in the United States (Kim, 2011). A study looking at 1,393 ELL students in eighth grade found that those students who were mobile had lower achievement test scores. (Kim, 2011; Rumberger, 2003). ELL students have higher rates of grade retention and higher high school drop-out rates. Drop-out rates for ELL students average 42 percent compared to 10.5 percent for students without language barriers (Slavin & Madden, 1999). High mobility negatively impacts high school graduation rates for mobile students (Kim, 2011; South et al., 2007). Mobility interrupts the acquisition of language, and ELL students who

have not built efficient language skills are at higher risks for dropping out of high school compared to their non-ELL/non-immigrant classmates (Slama, 2012). ELL students face grade retention more frequently, 46%, compared to non-ELL students, 37% (Kim, 2011; Slama, 2012). When compared to students of similar poverty levels in third grade, ELL student score poorer in reading and mathematics.

ELL students continue to have lower success rates in school once they have acquired proficiency with the English language. Specifically, Spanish speaking ELL students score lower on standardized reading tests in the United States than other minority or Caucasian students (Slavin & Madden, 1999). Conversely, a student who learns English after learning their native language early in their education has long term fiscal, intellectual, and cultural advantages (Hernandez et al., 2008). Additionally, learning two languages simultaneously does not impair the development of either language and offers aid to brain tissue density increasing attention, memory and language (Espinosa, 2008). Conflicting research claims that students who speak Spanish as their native language grow larger gaps in reading as they get older as compared to students who only speak one language or who speak a language other than Spanish as their native language (Slavin & Madden, 1999). Gaps between ELL students and non-ELL students average 20 points in fifth, eighth, and 10<sup>th</sup> grades for reading achievement. Gaps between ELL students and non-ELL students average 11 points in fifth, eighth, and 10 grades for math achievement. While gaps in reading are greater than in math, the gaps remain consistent nationwide for this student population (Kim, 2011). Elevated high school drop-out rates are not the last stage where high mobility impacts ELL students. Because of the difficulties associated with high mobility and acquiring a second language, ELL students are less likely to complete a post-secondary degree leading to lower paying jobs and the potential for living below the poverty

line (Slama, 2012). For those ELL students who do attend college, they often lack the academic language skills necessary for success in post-secondary educational institutions (Scarcella, 2003). Swanson, Orosco, and Lussier (2015) investigated the reasoning behind this issue. A two-year investigation of 410 first through third grade students was implemented to evaluate the relationship between students' working memory and short term memory and the impact this relationship had on lower reading scores. By the end of the two-year investigation, only 347 students remained in the program due to 63 students moving beyond the district being studied or back to their native country of Mexico. Results of the study show that second language acquisition students (L2) had growth in reading and vocabulary which was directly linked to the students' working memory. By the end of the two-year period, less data was exposed regarding the students' short term memory (Swanson et al., 2015).

ELL students, like African American students and students of low socioeconomic status, are more likely to move from one school to another, and, as a result each move causes the student to miss an average of four school days in the transition ("Student Mobility Negatively Linked," 2015). Additionally, socioeconomic status does have influence on language minority students and their academic achievement. Socioeconomic status impacted between three and six percent of ELL students' standardized test scores in reading (Collier & Thomas, 2002). High mobility exacerbates academic risks for ELL students in that they have higher educational requirements than those students who can speak English. ELL students must learn the required curriculum for their age in a language other than their native language, while also learning English. Being removed from the learning environment creates gaps in language attainment. (August et al., 2014).

Research is inconclusive regarding whether ELL students benefit from being taught in English or in their native language (Slavin & Cheung, 2005). Language-as-a-problem-paradigm or language-interface are terms labeling the theory that using the student's native language (also called the minority language) in instruction slows the attainment of the English language and is a deterrent to overall academic success for ELL students (Escamilla, & Hopewell, 2010). Bilingual education also has limited research regarding implementation, outcomes, and quality of the programs (R.R. Slavin & Cheung, 2005). Students who have not mastered the fundamentals of their native language should not be placed in an English only classroom. This submersion could hinder language acquisition requiring remediation well beyond the early grades. Dual language learning can be implemented as extension learning (Espinosa, 2008). A factor interfering with measuring ELL success is that often educators, including counselors and administrators, assign ELL students to a less rigorous classroom setting because language acquisition is confused with learning impairment. This decision is often made inadvertently and as a lack of other resources (Callahan, 2005). Depending on state legislation, language programs can be provided in a variety of ways: complete or partial immersion, transitional, developmental or two-way immersion (Ovando, 2003).

Collier and Thomas (1989) evaluated a population of 2,014 students representing 77 first languages with the majority of students being Asian or Hispanic. A majority of the students were classified as low socioeconomic by United States standards, yet a majority of the students' families were considered middle class and upper middle class in their native countries and moved to the United States for rising mobility. Students in the study had math scores above the national average after being in the country for no more than two years (p.72). Each student was identified as being above grade level in their native language schools and were needing English

as a Second Language (ESL) services upon arrival to the United States. This population of students was expected to be successful in attaining academic English at a rapid pace (Collier & Thomas, 1989). ELL students regardless of placement or learning pace are expected to learn the standard curriculum while also learning English as their second language (Crawford, 2004). Standardized tests were administered once students had studied for a minimum of two years. Students attended a combination of ELL classes and regular education classes not taught in their native language. Results determined that immigrant students of this caliber required five to seven years to fully grasp academic English (Collier & Thomas, 1989). Generally, students at most skill levels require four to seven years to the obtain academic language to speak in English (Crawford, 2004). Students who remain language learners and receive ELL services throughout their education career represents a failure to acquire the English language adequate for success in the classroom (Slama, 2012). Students arriving in the country between the ages of eight and 11 were the fastest to obtain the norms of academic English. One variable representing success was the number of years a child attended school in their native country (Collier & Thomas, 1989). However, mobility within the home country is necessary to factor in evaluating how long ELL students need to obtain English. Students who had moved during their educational career in their home country and were then taught only in English, scored significantly below national grade level (Collier & Thomas, 2002). Collier and Thomas (1989) explain that two years of school in the first language is significant to the success of obtaining a second language. ELL students who have attended formal education training in their native language for a minimum of three to four years will score within the 50<sup>th</sup> percentile on standardized education test across all contents after four to seven years of educational practice in the new language (Collier & Thomas, 2002). Students require three to five years to become proficient in conversational English, whereas four

to seven years is necessary for students to become proficient in academic language (Callahan, 2012; Slama, 2012). These results imply that attaining a second language is a long-term developmental process for students. A student in high school does not have the time remaining before graduation to lose instruction because of a residential or school move. Similar plans to evaluate lower level language learners were planned once this initial investigation was completed (Collier & Thomas, 1989). To date no research thoroughly analyzes language acquisition of a large population of students acquiring a second language (Slama, 2012).

ELL students, like other disadvantaged students, require additional education resources to repair gaps in learning. Unlike the resources needed for students living in low socioeconomic situations, ELL students need language support in their homes and communities (Gandara & Rumberger, 2008). Because this population is learning a second language parallel to learning the standards and curricula, additional resources are a necessity (Crawford, 2004). Specifically, ELL students have varying needs based on their current language proficiency, age upon entering public school in the United States, and their educational background. Gandara and Rumberger (2008) explained that this information comes from a study of California's ELL population, which is the largest in the nation. Forty-four percent of the population of students aged five to 17 in California speak a language other than English, that is 29 percent of the nation's total population of ELL. Other states average only 16 percent of student populations as ELL. Based on the equation to identify students to receive free and reduced lunch, 85 percent of the ELL population in California are also categorized as low socioeconomic. Based on 2005 reports from the California Standardized Tests in English Language Arts, 51 percent of non-ELL students scored within the ranges of proficient in second grade. The same English only students declined to 42 percent proficient by 11<sup>th</sup> grade (Gandara & Rumberger, 2008). A major concern with

standardized testing that goes into measuring these results is validity. Often the tools in place to assess are unable to decipher between errors of academic measure and errors based on language. Additionally, testing modifications cannot be measured to provide accurate test data. These accommodations could raise test scores resulting in a false positive (Crawford, 2004). The ELL students who were proficient in English (bilingual) when they entered public schools, scored higher than the non-ELL students until eighth grade when their scores fell below the scores of their non-ELL classmates. Scores for these students peaked in the lower grades and declined by the end of middle school (8<sup>th</sup> grade) and high school (11<sup>th</sup> grade.) However, the achievement gap concerning ELL students and non-ELL students remained unaffected (Gandara & Rumberger, 2008).

Educational institutions including public schools in the United States are “under-educating” this large population of language-minority students (Collier & Thomas, 2002.) Lower academic success of ELL students is often a result of academic content that is too low, limited educational environments and inadequate relationships between students and teachers (Callahan, 2005). Gandara and Rumberger (2008) identified seven areas that negatively impacted the academic and instruction needs of the large ELL population in California. First, ELL students are likely to have a classroom teacher who has not been adequately trained or certified to teach language minority students (Gandara & Rumberger, 2008). Educators in schools with high LEP populations have less educational training than their colleagues at schools with lower LEP populations. However, this distinction does not exist for new teachers (Cosentino de Cohen et al., 2005). Less than half of the ELL student population had an appropriately certified teacher in 2005 (Gandara & Rumberger, 2008). Schools with high populations of LEP students are more likely to have teachers and administrators with temporary licenses, provisional license or new

teachers with no license. At the same time, schools with low LEP populations fall behind high LEP schools in professional development training focused specifically on LEP populations (Cosentino de Cohen et al., 2005). Math teachers face the highest need for additional training and certification as ELL students are required to be assessed in math from the beginning of their arrival, whereas, in reading language arts, ELL students are required to be tested after 10 months of arrival (Crawford, 2004). A second area of concern identified by Grandara & Rumberger (2008) concerns the limited exposure language learners have to native speaking peers who are fundamental at modeling the use of language. Third, teachers with large ELL populations report inadequate facilities. Fourth, resources including text books specifically designed for ELL learners are not available. Fifth, valid and reliable assessment measures are not available to appropriately analyze language acquisition and proficiency of ELL students (Gandara & Rumberger, 2008). Limited research is available, which specifically designates which language, and to what degree the language is utilized on an assessment, for ELL students to be tested (Crawford, 2004). A sixth area of concern identified by Gandara and Rumberger (2008) is the need for professional development to promote appropriate teaching strategies are unavailable for this population of students. Lastly, teachers report not having additional classroom time to address to high demands of ELL student populations. The high mobility rate of this specific population makes it difficult for schools to address and fund the specific needs of these students in a timely manner (Gandara & Rumberger, 2008). Programs designed to close the gap for ELL students must be designed to produce long term effects. NCE gains of three to four and continue at this gain for five to six years to fully close the gap for ELL students (Collier & Thomas, 2002). Cosentino de Cohen et al (2005) go so far as to identify resources and services for LEP students as “allayed” (p. 1).



Immigrants are generally seeking a more promising future for their families. Children of immigrants usually live with parents who are employed full-time and are learning English as their second language (Hernandez, & Naplerala, 2012). While this population of students faces challenges, it is important to note that children born to immigrants are more likely to live in a two-parent home than their native born classmates. Also, children of immigrants are more likely to have siblings and grandparents in the home who aid in educational accomplishments (Garcia et al., 2009). Parents of ELL students have a stronger work ethic than those parents if United States' citizens (Hernandez et al., 2008)

### *Economics*

Funding ELL education in the United States is an investment in human capital. With the ELL population in the United States increasing by 18% between 2001 and 2012, state level budget plans for resources to fund the academic needs of this population are unclear (Horsford & Samson, 2013). State law makers have historically used costing out scenarios to assess the financial resources necessary to fund the minimum standards in education. Since the 1973 Supreme Court ruling in Rodriguez versus San Antonio, which determined that the constitution does not see education as a central right, states have been more dynamic in the financial side of public education (Rebell, 2002). Costing-out studies have been the primary method for defining the amount of money associated with educating students in the United States since the 1970s. More specifically, the costing out studies strive to determine how funding for suitable education is generated, how much the funding should be, and what resources are necessary to adequately fund a satisfactory public education. These costing out studies have been multiplied since the early 1990s (Jimenez-Castellanos & Trapper, 2012; Rice, 1997). However, costing-out studies generally neglect populations of ELL students by lumping them into categories with special

education or low socioeconomic student populations (Avitia & Lee, 2008). Fewer categories of populations makes the financial equation easier to calculate (Gandara & Rumberger, 2008). Finance in education litigation coupled, with the fierce attention on student performance, led to the creation of the No Child Left Behind (NCLB) act of 2001. The NCLB act required states to track spending for all student populations including ELL (Berne, Moser, & Stiefel, 1999). ELL populations fall under Title III of NCLB in terms of meeting adequate academic achievement. The wording of Title III strives to produce equal and adequate funding to successfully reach academic standards (Jimenez-Castellanos & Topper, 2012). Since 1990 four studies have been conducted to evaluate the cost analysis of school funding used exclusively for ELL students (Horsford & Samson, 2013). The primary costing-out studies utilized are: cost function analysis (CFA), successful school model (SSM), professional judgment panel (PJP), and evidence-based (EB) approach (Jimenez-Castellanos & Topper, 2012). Because the population dynamics are different for each state, specific details of school allocations for ELL are difficult to identify and compare (Horsford & Samson, 2013). Costing out legal proceedings have historically contended for equal disbursements of resources and funding for the minimum success in education (Belfield & Levin, 2007; Rice, 1997). The alternate: focusing on funding educational outcomes is economically more sound for promoting educational success fairly (Belfield & Levin, 2007).

Underfunded ELL programs is a common find in states, specifically in Nevada, the center of one funding analysis. As Nevada's ELL population has grown at a faster rate than the average, the state's lawmakers have determined that funding for this population is necessary. Specifically, how funding will be increased or designated has not been identified by Nevada's policymakers at the time the research was completed. Because ELL populations fall into other population categories, states often fail at adequately funding specific populations (Imazeki, 2008;

Gandara & Rumberger, 2008) This is a direct result of two-thirds of the ELL population in public schools falling below the poverty line (Avita & Lee, 2008). The 10 states with the fastest growing ELL populations between 2000 and 2012 are Alabama, Arkansas, Delaware, Kansas, Kentucky, Mississippi, Nevada, North Carolina, South Carolina, and Virginia. A common characteristic these states share is the rapid growth of ELL populations between 2001 and 2012. Of these 10 states, the growth in ELL population varies between 139 percent in Virginia to 610 percent in South Carolina. The same study shows the United States population growth for the same time period as being 18 percent (Horsford & Samson, 2013). Because of the rapid population growth, funding formulas must be specific as ELL students are not a homogeneous group and necessitate varying funds and resources (Avita & Lee, 2008; Gandara & Rumberger, 2008). Of the ten states in the study, the funding amounts and sources vary widely. Nevada, South Carolina, and Mississippi provide no funding for ELL students beyond the allocated per-pupil amount and North Carolina spends \$741 additional dollars beyond the per-pupil amount, the largest amount of dollars of the 10 states being evaluated (Horsford & Samson, 2013). ELL populations require additional funding weight equaling twice the per pupil spending for non-ELL students. As of 2008, the funding for ELL students was only one and a half that of non-ELL students (Avita & Lee, 2008).

The use of additional ELL funds varies by state. Weighted formulas, block grants, and lumps sums are examples of how the states funding ELL academic populations are choosing to use the money (Horsford & Samson, 2013). Having the largest population of ELL students (not highest growth) in the nation, analysis of funding shows that no per-student equation is used. However, the state spends approximately 13 percent more in supplemental funding for ELL students than non-ELL students in the state. This amount is still deemed insufficient. Gandara

and Rumberger (2008) state, “Current state expenditures for these students would appear to be inadequate, or at least organized inadequately to meet the learning needs of linguistic minority (LM) and English learner (EL) pupils” (p. 12).

From the studies on funding ELL populations a number of inconclusive findings have been identified. Evaluation of per-pupil spending recognizes that educating a disadvantaged student is more expensive than educating a student that is non-disadvantaged. No specific dollar amount has been identified as what is needed to adequately fund the process of educating an ELL student. It is also unclear how much additional funding is needed to educate disadvantaged students versus ELL students. Many of these findings show that amounts will differ based on the grade levels of the students in question. It is unclear how much additional funding is necessary to ensure these students reach language proficiency. (Gandara & Rumberger, 2008).

ELL students show higher gains when a connection between English and their native language can be made (August, McCardle et al., 2014). Instruction using native language is more commonly in place in schools with higher LEP populations where classroom instruction is adapted to the specific needs of English language learners (Cosentino de Cohen et al., 2005). Connections can be made between native literacy skills and acquisition of English literacy skills, if a student has a foundation built in the native language. Using a student’s first language to attain skills in English requires teachers who are trained in this technique or who are fluent in a second language. Additionally, most school counselors and psychologists are the first individuals to make decisions on behalf of ELL students’ initial placement, make connections with the home, select assessment protocol, or identify interventions for minimal or no progress. Both professions (teacher and counselor) need training in assessing and identifying appropriate measures for the students in this population. The salaries and training for both ELL teachers and

school psychologists to specialize in this area exceeds the per pupil spending for many school districts, again creating financial strains on educational institutions (August et al., 2014).

Highly mobile students receive Title I assistance more frequently compared to their less mobile counterparts. Sixty-two percent of schools with a population consisting of highly mobile students receive the assistance. Only 46 percent of schools with less mobility received Title I funding (U.S. Government Accountability Office, 2010). Another source states that over 80 percent of schools with high LEP populations receive Title I funds whereas only 60 to 70 percent of schools with no or low LEP populations. (Cosentino de Cohen et al., 2005). The Department of Education has four major programs in place to assist disadvantaged students including those with limited English proficiency, students with disabilities, students who are homeless, low income or migrants. Title I, the McKinney-Vento Education Act for Homeless Children and Youth, Migrant Education Program and the Individuals with Disabilities Education Act (IDEA). Additionally, the Department of Agriculture funds the School Breakfast Program (SBP) and the National School Lunch Program (NSLP) for low income public school students. (U.S. Government Accountability Office, 2010). Title I funds are more often distributed to high LEP schools as a schoolwide distribution instead of targeted funding (Cosentino de Cohen et al., 2005).

Individual states fund educating disadvantaged students differently. ELL students, students with disabilities and students who are classified as low socioeconomic status receive extra weight on categories states identify funding (Duncombe, & Yinger, 2004). Schools with high LEP populations are more likely to have higher rates of low socioeconomic status populations. The percentage of students labeled with free and reduced status in high LEP schools is 72 percent, whereas the population for free and reduced status is 40 percent in lower LEP

schools (Cosentino de Cohen et al., 2005). State funding is built on the disadvantaged students identified in a district. This method is similar to a cost index. Therefore, districts with more students classified as disadvantaged receive more funding. (Duncombe, & Yinger, 2004). A majority of states provided less funding per student in 2015 as compared to 2008 or pre-recession standards, even when adjusting for inflation (Baker, Sciarra, & Farrie, 2015). Most states use a formula which contains a cost-index method. These formulas do adjust for the student identified as disadvantaged using a weighted method per pupil. Educators and policymakers differ on formulas to use for calculating funds for per-pupil spending. Policymakers lean to a weighted formula whereas educators identify the necessity of an education cost index, resulting in less funding for districts (Duncombe & Yinger, 2004).

#### *Procedures to Support Mobile Populations*

While this disadvantaged population continues to grow, states have adopted bilingual education services as early as the 1800s (Ovando, 2003). Across the country, educators and administrators are looking for procedures and plans to best reach students with a variety of cultures, backgrounds, languages, and needs (Avita & Lee, 2008.) Programs and initiatives are in place to decrease the negative impacts of mobility on students, schools, and communities, and to increase language and reading skills (Smith, Fien, & Paine, 2008). As early as the 1960s, research was being conducted to determine best practices for easing the transitions for mobile students. A child's self-respect and self-understanding is tied to his or her ease in adjusting to a new school, and educational institutions are encouraged to assist in the process. For example, it is recommended that schools implement systems and trainings, such as new student handbooks for new students, and that teachers be trained to look for signs of distress in mobile students.

However, by the 1980s the NEA determined that following such heavy guidelines was too laborious for parents and teachers (Newman, 1988).

Schools that create reading programs for all students have more successful student populations, even those with high mobility. Because of gaps in reading between mobile and non-mobile students, the Bethel School System in Eugene, Oregon, implemented a districtwide reading program that includes specific strategies to off-set the negative impacts of school mobility. This implementation was begun over 10 years ago. The plan in place addresses the major concerns with high mobility: assessment, instruction, records, and family support. While there is no research directly from the Eugene, Oregon, school district as a result of these plans. Research went in to the development of the reading and intervention plan in place (Smith et al., 2008).

To address the social and behavioral needs of mobile students in a new school environment, a variety of strategies are being implemented to assist (U.S. Government Accountability Office, 2010).. Schools can assign a buddy to greet and escort new students through the geography and new procedures of the day. A Michigan principal begins school one day early to acclimate new parents and students to the new school. The same district created a welcome committee for students entering the new school (U.S. Government Accountability Office, 2010).

Slavin and Madden (1999) explain that the instruction ELL students receive has been evaluated to analyze whether these students have a higher success rate being taught in the native language or in English. The debate between the language of instruction occurs more frequently between policymakers and less by educators. ELL students who are taught in their native language do perform higher on standardized tests (Slavin & Madden, 1999). The majority of

ELL students in the United States' public schools are taught in English and not the student's native language. Slavin and Madden's research into the overall quality of ELL instruction has been conducted since the early 1980s while limited research is in place evaluating bilingual instruction. The quality of instruction and need for early reading and long term successful reading skills are more important than language of instruction. One of the first major academic initiatives used with ELL students was titled Success for ALL and had two specific designs. One design taught ELL students to read in Spanish and then taught them to read in English. The premise was to build literacy skills prior to teaching a second language. The second design of Success for All implemented second language learning at the same time as English reading skills are taught. Results evaluating the program were positive when the curriculum was used singularly. Students were immersed and included elements of support beyond the classroom involving families (Slavin & Madden, 1999). A federal program titled Migrant Education Program provides online mentoring programs to migrant students. It has a tracking program to keep records of migrant students, offering easier transfers to new schools. No Child Left Behind (NCLB) put into place the McKinney-Vento Homeless Assistance Act. Slavin and Madden report that this act allowed students who are homeless to stay enrolled in their school regardless of zoning rules specific to the district (p. 12).

Additional programs are in place to offer mobile students learning opportunities online and at convenient times (Kerbow et al., 2003). Some initiatives are designed specifically for students who are migrant workers by focusing on school work on an agricultural schedule. Examples of these initiatives include: Project SMART (Summer Migrants Access Resource Through Technology) and Project ESTRELLA (Encouraging Students through Technology to Reach High Expectations in Learning Life skills and Achievement). According to Kerbow et al.,



(2003) both are federally funded programs designed to target migrant students' specific educational situations. The Chicago Public School System implements an educational awareness program called *Staying Put*, which educates families and teachers on the negative effects of school transitions. Community Schools in Chicago were created to nurture the whole child in transition. Students can receive healthcare, obtain help with academic work, attend classes, participate in camps, and play sports at the Community Schools (Kerbow et al., 2003). The goals established for these centers are wide and rely on parents to volunteer and participate. Parents are trained on the best practices to help their child become more successful. The long range goals of the Community Schools are to lengthen the amount of time students are in school, to enhance their exposure to materials, and increase their academic success all the while becoming part of a strong social community. Moffett Elementary School in Los Angeles, California, is intentional in the efforts to assist new students to the school. Moffett utilizes mentors and counselors to assist not only the student but the families during the first weeks of transition into the school. Many of these programs, designed to decrease mobility or help the transition process, have taken ideas from the United States Department of Defense (Kerbow et al., 2003). Students of active military are among the highest mobile populations in the country. The Department of Defense has specialized training for educators and administrators dealing with every aspect of the transition process making the change less disruptive to the student, family, and school (Hartman; 2006 Kerbow et al., 2003).

On a small scale, many schools implement ability grouping into the daily schedule (Kerbow et al., 2003). This placement is precarious in that teachers often do not have adequate records to identify appropriate placement for students who are transferring into a new school. A highly mobile student risks incorrect placement in an academic group as the chance for

incomplete records is high. Once again, the teacher is responsible for the decision making to accurately place new students. This decision impacts the students' academic performance in future grades (Kerbow et al., 2003). To alleviate the dilemma of incorrect placement and lost or delayed records, Texas implemented an electronic system used to transfer student information within the state as reported by the U.S. Government Accountability Office. Every part of a student's permanent record: IEP, immunizations, residence status, grades, home language status, language proficiency, and test scores are transmitted electronically to the new school within the state. (U.S. Government Accountability Office, 2010).

While limited research is available to specifically provide solutions to decrease mobility within ELL populations, a recent autoethnographical study of seven school administrators, who were chosen based on their dedication to equity and social justice for marginalized populations (including ELL,) show how they improved student achievement for these populations (Theoharis, 2010). Across three states and a period of several years, the seven school administrators, were selected to document their efforts and be documented during the process of creating a culture change in their schools; the results of which would equalize educational opportunities and advance social justices for populations of students previously considered to be marginalized. Theoharis also reports that principals were charged with focusing on the matters of students of all socioeconomic levels, race, disability, gender, and sexual preference. Systematically, this created a focus on the needs of students who were generally segregated in learning environments like ELL and special education. Through strong social justice leadership, these administrators became advocates for these populations which historically have been underserved. According to Theoharis (2010) the agenda for the plan has three components: “increase inclusion, access, and opportunity, improve the core-learning context, and create a

climate of belonging” (p. 281). English and Tillman (2010) claim that putting these populations at the center of each schools’ structure created strong resistance from within the school and from external sources. Each school removed programs where students were removed from the learning environment and into self-contained or pull-out environments, which created an equal opportunity for ELL and special education students. Schoolwide rigor was strengthened, learning time was increased, and all stakeholders (including students) were charged with accountability for student learning. Results showed that student test score data rose as a result of the social justice leadership application. Specifically, ELL students made gains in achievement of almost 100% (English & Tillman, 2010). These decisions, made by diligent administrators, are vital to the academic success of Latino students (Parrett, & Budge, 2012).

The University of Minnesota, People Serving People, and The Minneapolis Public School District combined resources to create the People Serving People Children’s Center (Obradović et al., 2009). The Children’s Center is located on the campus of the People Serving People homeless shelter and is designed to offer educational support to students and families who are highly mobile or homeless. The Children’s Center was designed by researchers from the University of Minnesota’s Institute of Child Development, and College of Education and Human Development. Obradović et al., claim it was created with a specific focus on early childhood development and a licensed preschool program. Also, Mary’s Place is a second homeless shelter in Minneapolis, which offers educational reading programs to homeless and highly mobile students. While Mary’s Place is staffed with volunteers for the after school one-on-one tutoring program and the one-on-one summer reading program, records of attendance indicate that a high number of students visiting the reading program are ELL students responsible for school curriculum and acquiring English as their second language (Obradović et al., 2009).

Thirty-two school districts were represented in a study (Durante et al, 2002) which interviewed school guidance counselors, social workers, and administrators in educational institutions with high mobility rates. Each respondent reported having a minimum of 30 percent of their student population enrolled after the beginning of the school year and withdraw before the last day of school. Durante et al., explain that each interview inquired into school mobility rates, the antecedents, processes, and consequences surrounding the mobility (see table 1) and the procedures in place to support the mobile students (Durante et al., 2002). Result of this study align with previous notions regarding mobility:poverty issues including lack of food, clothing, limited housing options, unemployment are the culminating issues. Previously unmentioned, the stigma attached with high mobility arose in this interview process. The authors conclude that when questions about the specific problems related to school mobility, “all participants noted untimely and often inaccurate assessments and placement of mobile students, disruption in strategic teaching patterns, and inefficient record-keeping (Durante et al, 2002, p. 325). In regards to procedures in place to assist mobile students, a majority of participants indicated that the best strategy to prevent families of students from moving again were programs and services to assist with domestic and family needs, academic guidance, counseling and assistance with community building. While participants anticipated that the best plan to limit mobility of students and families, most participants were unsure that their services “helped families to become more stable” (Durante, 2002, p. 326. According to Durante et al., “It is also interesting to note that none of the programs directly address the school related causes of mobility” (p. 326). Complete results are illustrated in Table 2 (Durante et al., 2002).

Table 1.

*Reports of Interventions that Address Challenges of School Mobility*

Respondents (N=18) Reports of Interventions That Address Challenges of School Mobility

Program Focus, Domain, and Category of Intervention	%	N	Response Rating
<b>Antecedents:</b>			
Provision of basic family needs:			
Before- after-school programs	94	17	Typical
Personal/family counseling	89	16	Typical
Food and clothing bank	83	15	Typical
Health Clinic	44	8	Variant
Breakfast and lunch programs	44	8	Variant
Educational Development of Parents	39	7	Variant
Shelter relocation service	5	1	---
<b>Processes:</b>			
Education/academic development:			
Intensive schoolwide academic programs	89	16	Typical
Tutoring	83	15	Typical
Before- or after-school clubs	44	8	Typical
Saturday School	11	2	Variant
Welcome classrooms	11	2	---
Faculty/staff development	11	2	---
<b>Consequences:</b>			
Personal development of students			
Schoolwide social skills activities	61	11	Typical
After-school clubs	28	5	Variant
Assigned mentors	5	1	---
Strengthening family bond:			
Personal/family counseling	89	16	Typical

Table 1 (continued)

Family support teams	33	6	Variant
Family camps	39	7	Variant
Parent education	33	6	Variant
Program Focus, Domain, and Category of Intervention	%	N	Response Rating
Health and resource centers	44	8	Variant
Cultural activities	44	8	Variant
Family camps	39	7	Variant
Welcome centers	28	5	Variant
Migrant liaison	11	2	---
Multiage programs	11	2	---

## CHAPTER 3

### METHODOLOGY

The purpose of correlational research is to identify relationships (Mertler, 2016). Collecting data on mobile populations is challenging methodologically. Finding the reasons prompting the residential moves further challenges the data collection process (National Research Council, U.S., Beatty, 2010). This chapter includes descriptions of the sample used in this quantitative, nonexperimental study which determines the relationship between school mobility and language proficiency among ELL students. The study focused on ELL students in a small school district in Tennessee. Comparisons were made between male and female students and mobile and nonmobile students. The goal was to judge the values of the given data and utilize the results with methods best designed to determine possible correlations, relevance and obtain conclusions (Leedy & Ormrod, 2016).

#### *Sample*

The total population identified for this study was 1,077 kindergarten to 12th grade ELL students in a small school district in Tennessee. By district definition students are classified as ELL if they qualify for English as a second language (ESL) services whether they decline classroom services or not. They must be served by the ELL teacher on consultation. Forty-six percent of this population is female (498) and fifty-four percent is male (579). The number of students being served decreases in number from first to twelfth grade with the exception of second, third, and ninth grade. This population reflects the number of ELL student in the district at the end of the 2015-2016 school year.

Table 2.

*Total ELL Population by Grade*

K	1 <sup>st</sup>	2 <sup>nd</sup>	3rd	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10th	11th	12 <sup>th</sup>
161	161	185	174	99	85	47	44	33	48	18	16	6

The total number of participants (sample) in this study consisted of 787 ELL students in first through twelfth grade who took the WIDA assessment during the 2015-2016 school year. Kindergarten students did not take the assessment and 129 students had incomplete or missing mobility data. Therefore, the sample represents 73 percent of the total population.

Table 3.

*Sample by Grade*

1 <sup>st</sup>	2nd	3rd	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7th	8 <sup>th</sup>	9 <sup>th</sup>	10th	11th	12th
154	151	152	103	63	48	31	28	22	18	9	8

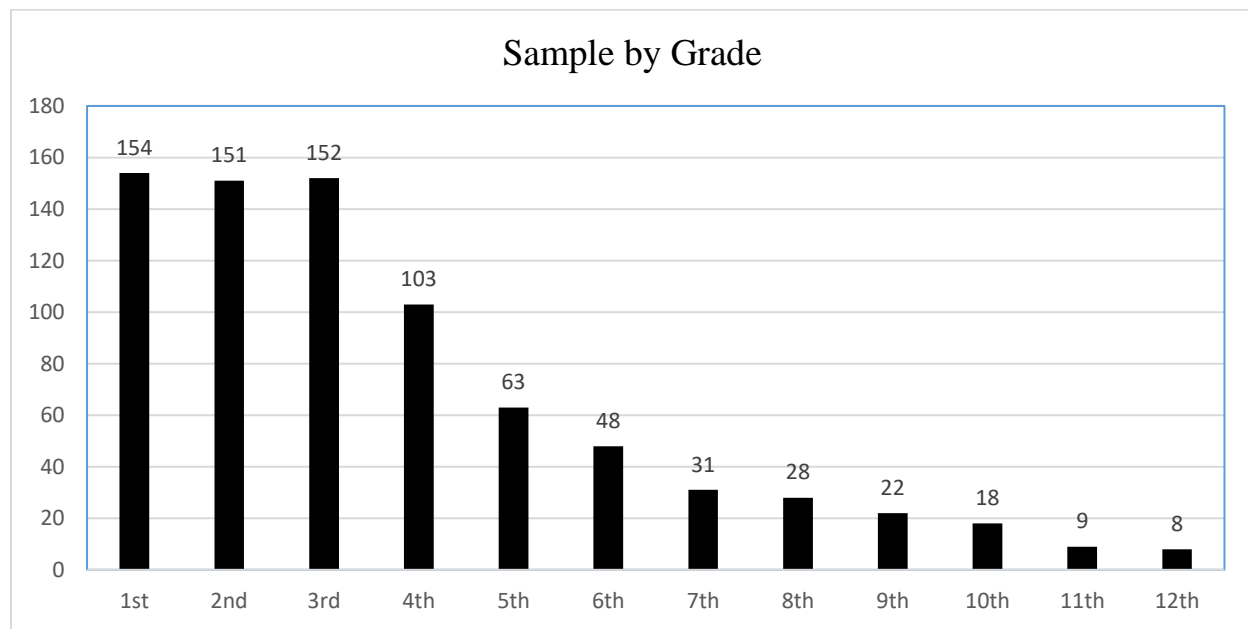
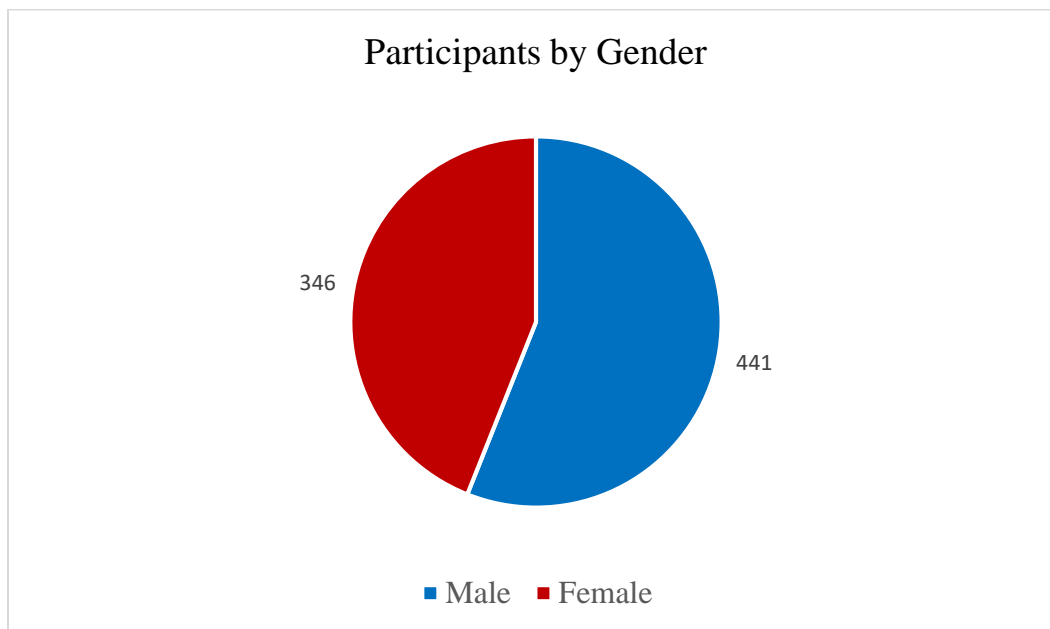


Figure 2: Sample by Grade



Over half, 56 percent, of the sample are male ( $n= 441$ ), and 43% of the sample are female ( $n=346$ ). Figure 2 shows the percentage of male and female participants. Figure 3 shows the total mobility of the sample. Of the sample, 61 percent ( $n=482$ ) students had not moved schools. The majority of students, 91 percent ( $n=723$ ) are considered less mobile as they have changed schools 2 times or less. The smallest percentage of students, 9 percent ( $n=64$ ) are highly mobile as they have moved schools 3 or more times. No students were found to have moved 8 times or more than 10.



*Figure 3: Participants by Gender*

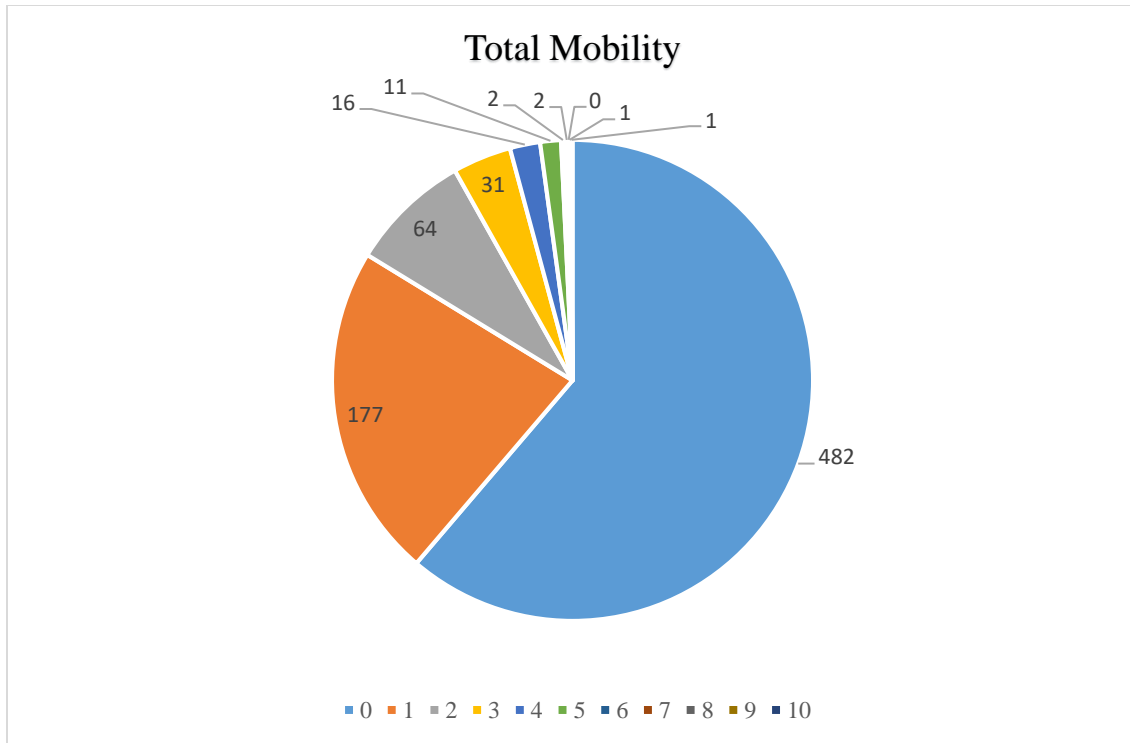


Figure 4: Total Mobility

### Research Questions and Null Hypotheses

The following research questions and corresponding null hypotheses guide the study.

#### Research Question 1:

Is there a significant difference between the mean scores of mobile and non-mobile ELL students language proficiency attainment as measured by WIDA?

HO<sub>1</sub>: There is no significant difference in the mean scores of mobile and non-mobile ELL students language proficiency attainment as measure by WIDA.

#### Research Questions 2:

Is there a significant difference between the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measured by WIDA?

HO<sub>2</sub>: There is no significant difference in the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measure by WIDA.

*Research Question 3:*

Is there a significant difference between the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measured by WIDA?

HO<sub>3</sub>: There is no significant difference in the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measure by WIDA.

*Research Question 4:*

Is there a significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students?

HO<sub>4</sub>: There is no significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students.

*Instrumentation*

Language acquisition is measured by the WIDA English language proficiency test. WIDA was administered online for the first time in 2016 (WIDA: ACCESS for ELLs, n.d). The test is named for the three states initially involved in the 2002 grant which gave funding to the test's conception: Wisconsin, Delaware, and Arkansas (WIDA.us, 2017). The test is given in a specific order: listening, reading, writing and speaking. The speaking portion of the assessment is recorded and scored by WIDA Consortium. There is a 10:1 teacher to student ratio for administering the online test and a 5:1 ratio for administering the speaking portion of the test. Prior to the online test, the speaking portion of the test had to be administered one-on-one. Seven

language domains are measured by the WIDA test: listening, speaking, reading, writing, oral language, literacy and comprehension. Students are given a score of 1-6 based on the description of proficiency levels: entering, emerging, developing, expanding, bridging, or reaching (WIDA: ACCESS for ELLs, n.d). The reliability of the test is minimally limited in the area of speaking as it is subject to what is heard by the scorer. There are guides and rules in place to make the reliability high in this area if the test. The WIDA test is valid in areas of population and purpose yet lacks validity in environment. The WIDA test environment is not protected to the same level as other mandated tests. Improvements are being made to increase validity of the testing environment. Students are now tested in a secluded computer lab (instead of open classrooms) to decrease the number of distractions (WIDA: ACCESS for ELLs, n.d).

#### *Data Collection*

Data strengthens a study by providing the findings with reliability and validity (Yin, 2013). The director of schools for the district granted permission to conduct data collection of WIDA scores and student mobility. The research did not contain identifiable information on the population sample. A request to the Institutional Review Board (IRB) was submitted for approval to collect and analyze mobility and test data on students from all schools in a Tennessee public school district. The final IRB determination was that this proposed activity did not meet FDA or DHHS definition of research involving human subjects.

The data for this study provided indications of the impact student mobility has on language acquisition. Data were collected on mobile and nonmobile ELL students in first through twelfth grades from one school district. To collect mobility data, PowerSchool was accessed to generate reports of all ELL students who had taken the WIDA test during the 2015-2016 school year using their unique state identification number. PowerSchool is Pearson's record

and data management system for educational institutions. This entailed compiling the unique state identification number of each ELL student and referencing each unique state identification number's entrance and exit date into the school district. As PowerSchool only began recording entrance and exit dates for students in 2009, those unique state identification numbers with entrance and exit dates prior to 1990 had to be further investigated in EIS (Educational Information System). The unique state identification numbers with incomplete entrance and exit records were searched in EIS for enrollment data. With a list of 787 complete school histories, those unique state identification numbers were then used to obtain WIDA scores for those students who were enrolled and took the WIDA test during the 2015-2016 school year. The two reports were manually merged into one report y by using the unique state identification number to identify scores and enrollment data. The frequency of mobility was identified as zero moves, one moves, two moves and three of more moves. Three moves or more is considered high mobility.

### *Data Analysis*

Descriptive statistics to measure central tendency (mean) will be reported. To determine if there is a significant difference between the mean WIDA scores of mobile and non-mobile ELL students, both male and female, Independent t-tests were used. This addresses Research Questions one, two, and three. To identify the correlation between the frequency of mobility and language proficiency attainment, a Pearson Correlation coefficient was computed and reported. This test addresses Research Question four. The dependent variables in the analysis are WIDA test scores. The independent variables in the analysis are the number of school transitions (mobility), and gender. SPSS (Statistical Program for the Social Sciences) will be used for all data analysis. All data was analyzed at the .05 level of significance.

## CHAPTER 4

### *RESULTS*

#### *Introduction*

Student mobility is linked to adverse student behavior and lower academic progress (Rumberger, 2015). Mobility causes a strong inconsistency in student achievement (Fisher et al., 2002) The purpose of Chapter 4 is to explain the findings of each research question identified in chapter 3. This study was completed to identify a correlation between student mobility and language acquisition.

Data were collected on mobile and nonmobile ELL students in first through twelfth grades from one school district. Scores from those students who were enrolled and took the WIDA test during the 2015-2016 school year were collected. A mobility history for the same students were collected. This history reported the number of school moves students had since their entrance date into kindergarten. The frequency of mobility was identified as zero moves, one moves, two moves and three of more moves. Three or more moves is considered high mobility.

#### *Research Question 1:*

Is there a significant difference between the mean scores of mobile and non-mobile ELL students language proficiency attainment as measured by WIDA?

HO<sub>1</sub>: There is no significant difference in the mean scores of mobile and non-mobile ELL students language proficiency attainment as measure by WIDA.

An independent *t* test was conducted to determine the difference between the mean WIDA score of nonmobile and mobile ELL students. The test results were not significant  $t(785) = 1.21$ ,

$p = .083$ . Therefore, the null hypothesis was retained. The results showed that the mobile students mean score ( $M = 5.16, SD 25.47$ ) was slightly, but not significantly higher than the mean WIDA score of nonmobile students ( $M = 3.76, SD 1.11$ .) The 95 percent confidence interval of the difference in means was small, with the lowest being  $-4.25$  and the upper being  $1.44$ . Figure 4 illustrates the mean WIDA scores.

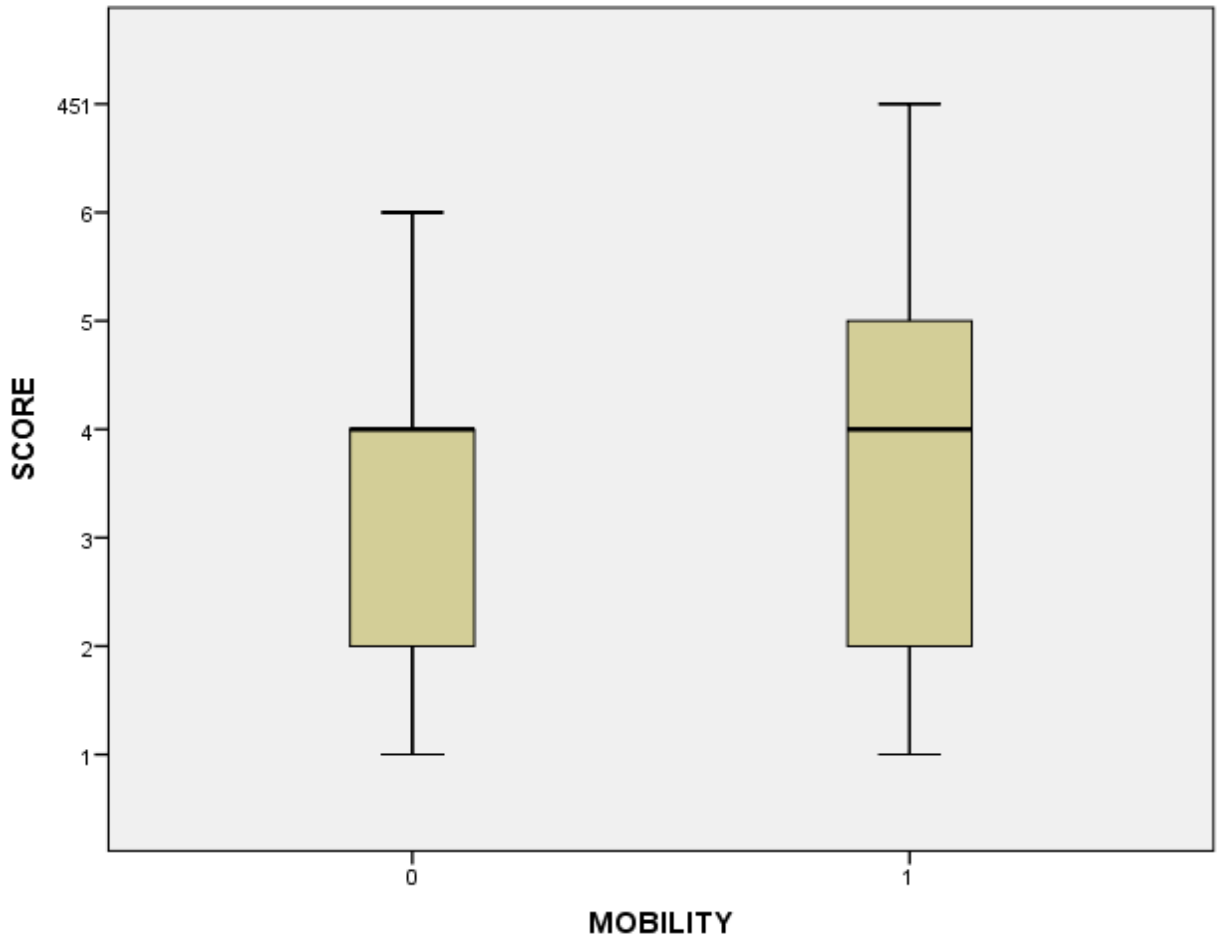


Figure 5: WIDA Scores for Mobile Non-mobile Students

*Research Questions 2:*

Is there a significant difference between the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measured by WIDA?

HO<sub>2</sub>: There is no significant difference in the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measure by WIDA.

An independent *t* test was conducted to determine the difference between mean WIDA score of mobile and nonmobile male ELL students. The test results were not significant for nonmobile male ELL students,  $t(358) = 1.97, p = .799$ . Therefore, the null hypothesis was retained. The results showed that the mobile male ELL students mean scores ( $M = 3.49, SD = 1.17$ ) were lower than the mean WIDA score of the nonmobile male ELL students ( $M = 3.77, SD = 1.15$ ) by a small margin. Figure 5 shows the comparison of mean scores. The 95% confidence interval of the difference was small, extending only from .530 to .532. The comparison is displayed in figure 5.



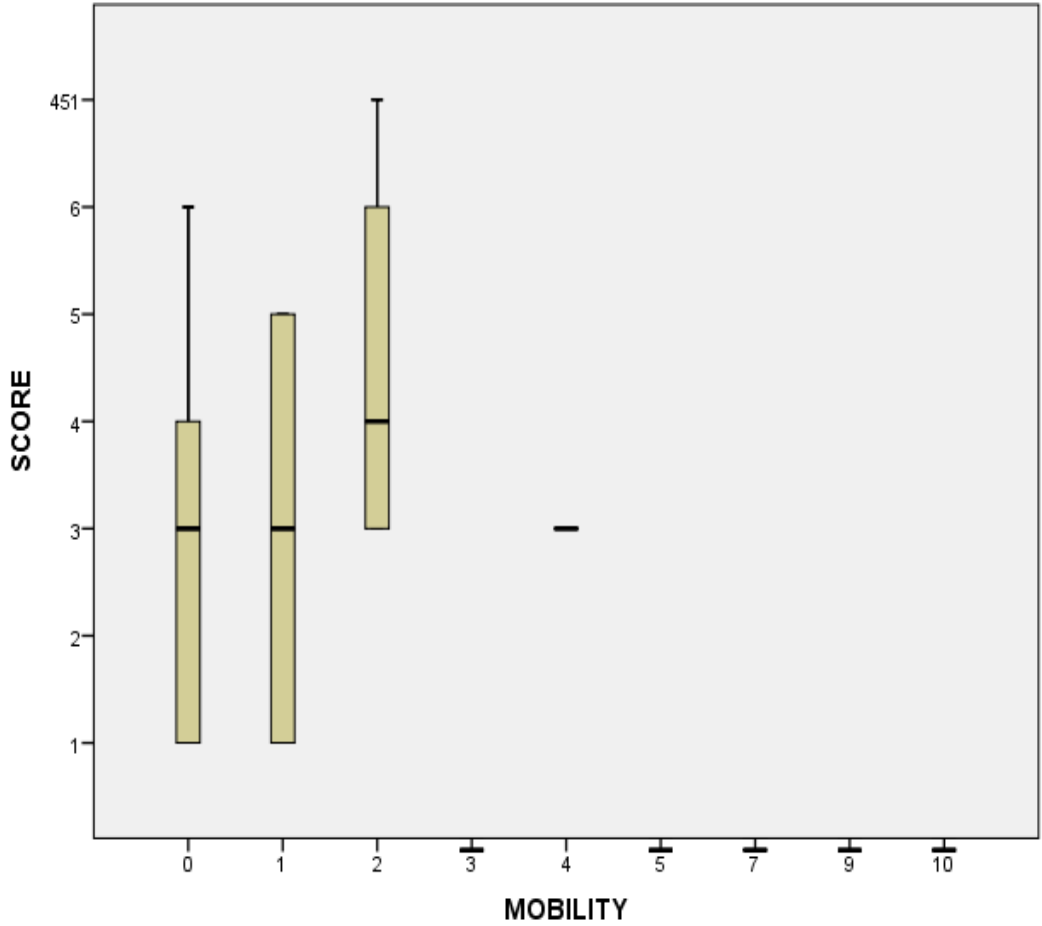


Figure 6: Mean WIDA Score for Mobile and Non-mobile Male Students

*Research Question 3:*

Is there a significant difference between the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measured by WIDA?

HO<sub>3</sub>: There is no significant difference in the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measure by WIDA.

An independent samples test was conducted to determine the difference between the mean WIDA scores of mobile and nonmobile female ELL students. The test results were not significant,  $t(346) = 1.31, p = .92$ . Therefore, the null hypothesis was retained. The results showed that the female mobile ELL students mean WIDA scores ( $M = 3.91, SD = 1.03$ ) were slightly, but not significantly higher than the non-mobile female ELL mean WIDA scores ( $M = 3.75, SD = 1.06$ ). The 95 percent confidence interval of the difference shows a minuscule range, only extending  $-.382$  to  $-.381$ . Figure 6 identifies the comparison between mean WIDA scores of mobile and non-mobile female ELL students.

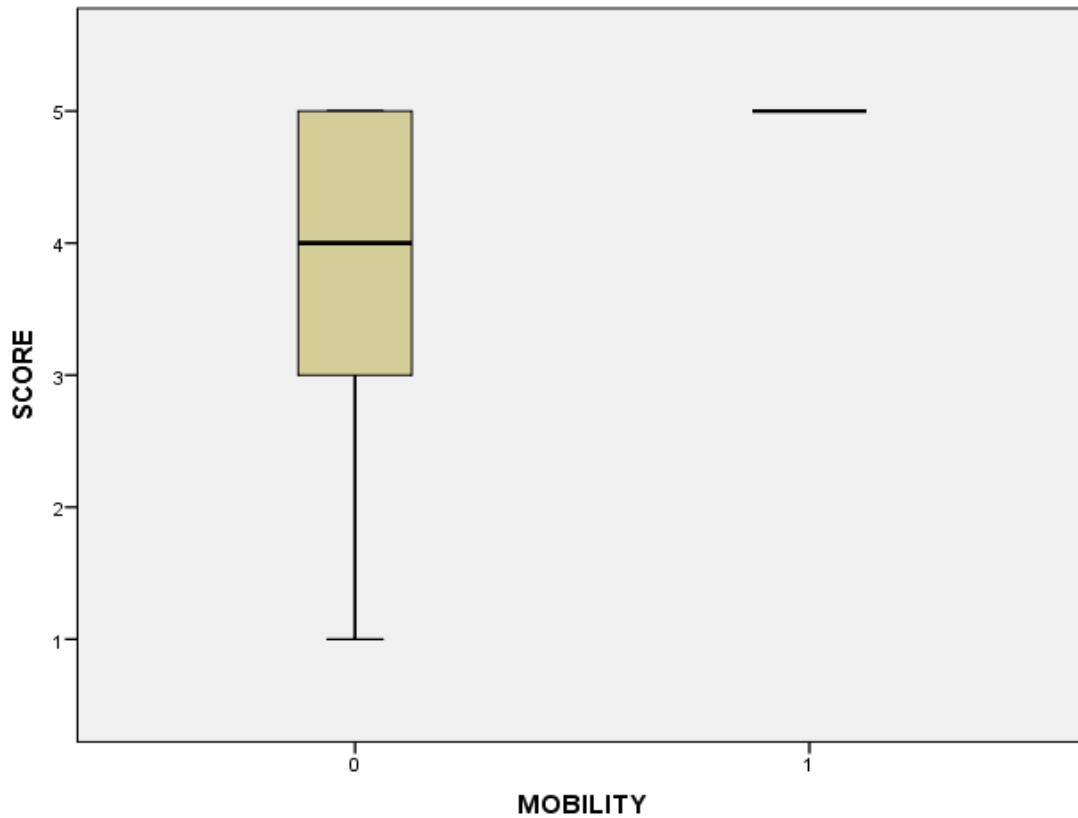


Figure 7: Mean WIDA Scores for Female Non-mobile and Mobile Students Bar Graph

*Research Question 4:*

Is there a significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students?

HO<sub>4</sub>: There is no significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students.

A Pearson correlation coefficient was used to determine the relationship between the degree of mobility (frequency) and the language attainment scores among ELL students. The results of the analysis revealed a positive relationship between frequency of mobility ( $M=325.22$ ,  $SD=1.28$ ) and score ( $M=658.32$ ,  $SD=2.56$ ) with no statistically significant correlation  $r(068)=-.348$ ,  $p=.207$ . As a result of the analysis, the null hypothesis was retained. In general, the results suggest high frequency of mobility is not necessarily associated with high language proficiency scores. Table 7 illustrates the correlation.

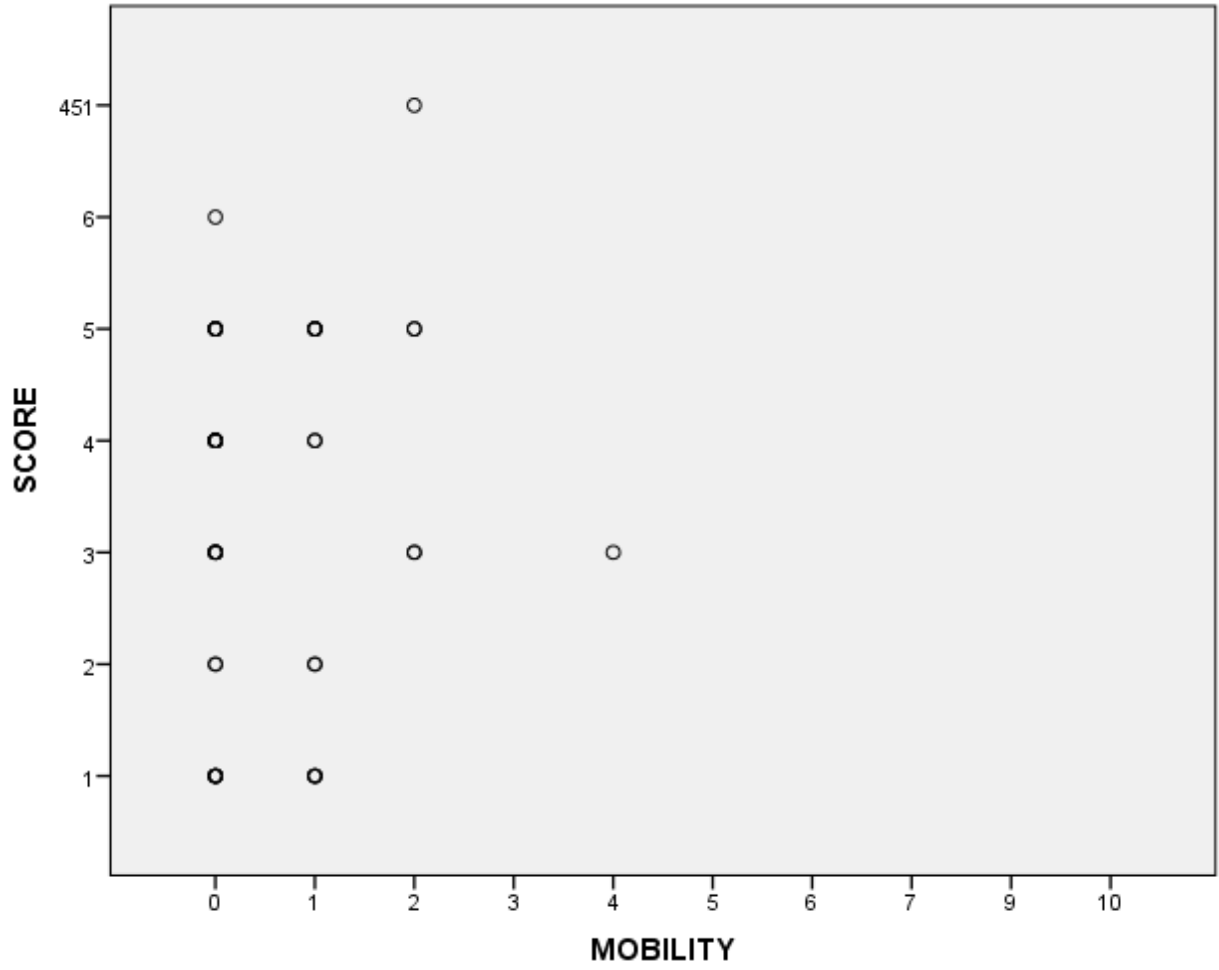


Table 8: *Degree of Mobility and Language Proficiency*

## CHAPTER 5

### CONCLUSION, SUMMARY, AND RECOMMENDATIONS

#### *Overview*

Leedy and Ormrod (2016) state, “Conducting the research required to write an acceptable thesis or dissertation is one of the most valuable educational experiences a person can have” (p. 58). From this study, a number of common factors have emerged. First, multiple studies have been conducted to evaluate exactly how specific school mobility impacts student achievement. Secondly, mobility does impact students in normal school transitions, such as promotion to the next grades. Also, students do have a slightly higher rate of academic success if they attend kindergarten through eighth grade schools compared to those who attend a middle school with grades sixth through eighth (Sparks, 2016). However, mobility is not the single most influential consideration in academic achievement or failure. Race and socioeconomic status (SES) are the two greatest predictors for academic success (Abrams & Kong, 2012). Considering the ELL population in America’s schools is rapidly increasing and the rate of student mobility among them is an issue for all educational stakeholders, it is important to understand all variables surrounding the experience of mobility.

Significant negative correlations exist between a student’s academic success and the frequency of school moves in their educational careers (e.g. Adams, C., 2017;; Obradović, J., Long, J. D., Cutuli, J. J., Chan, C.-K., Hinz, E., Heistad, D., ... Herbers, J., 2008;). However, mobility is not the greatest singular factor negatively impacting student achievements. Yet when combined with other elements like poverty and attaining a second language, this specific

population of students face immense barriers. It is important to note that all mobility for children is not negative. Residential mobility can be a positive experience for families. If parents are seeking better schools, moving as a result of upward mobility or escaping dangerous living arrangements, students should benefit (Murphy, et al., 2012). Financial variability and parents' occupations are the greatest causes for student mobility (Spark, 2016).

### *Summary of Results*

The purpose of this quantitative study was to identify the correlation between mobility and language proficiency attainment as measured by WIDA among ELL students in a small school district in Tennessee. Prior to testing the data to determine if significant relationships exist between mobility and language acquisition, the sample was evaluated to determine frequency of mobility among students. Unlike the findings in current research, the sample in this study showed less mobility than mobility. Only 39 percent of the students in the sample are mobile, see figure 3. This equates to 61 percent of the population of students having no school moves in their educational career. It is important to consider that most of the students in the sample represent lower elementary grades.

The following research questions were used to guide the study.

#### *Research Question 1:*

Is there a significant difference between the mean scores of mobile and non-mobile ELL students language proficiency attainment as measured by WIDA?

An independent  $t$  test was conducted to determine the difference between the mean WIDA scores of non-mobile and mobile ELL students. The test results were not significant. The results show that the mobile students mean score ( $M = 5.16$ ) was not significantly higher than the mean WIDA score of non-mobile students ( $M = 3.76$ .)

*Research Questions 2:*

Is there a significant difference between the mean scores of mobile and non-mobile male ELL students language proficiency attainment as measured by WIDA?

An independent  $t$  test was conducted to determine the difference between mean WIDA score of mobile and nonmobile male ELL students. The test results were not significant for nonmobile male ELL students. The results showed that the mobile male ELL students mean scores ( $M = 3.49$ ) were lower than the mean WIDA score of the nonmobile male ELL students ( $M = 3.77$ ) by a small margin.

*Research Question 3:*

Is there a significant difference between the mean scores of mobile and non-mobile female ELL students language proficiency attainment as measured by WIDA?

An independent samples test was conducted to determine the difference between the mean WIDA scores of mobile and nonmobile female ELL students. The test results were not significant. The results showed that the female mobile ELL students mean WIDA scores ( $M = 3.91$ ) not significantly higher than the non-mobile female ELL mean WIDA scores ( $M = 3.75$ ).

*Research Question 4:*

Is there a significant correlation between the degree of mobility and language proficiency attainment as measured by WIDA among ELL students?

A Pearson correlation coefficient was used to determine the relationship between the degree of mobility (frequency) and the language attainment scores among ELL students. The results of the analysis revealed a positive relationship between frequency of mobility ( $M=325.22$ ) and score ( $M=658.32$ ) with no statistically significant correlation. In general, the results suggest high frequency of mobility is not necessarily associated with high language proficiency scores.

Contrary to the literature reviewed in chapter two regarding the academic success of mobile and non-mobile students, the sample in this study produced higher WIDA scores than their non-mobile counterparts. Students who are classified as mobile (three or more moves) scored 1.4 points higher than those classified as nonmobile (two or fewer moves). Overall mobile students scored higher than non-mobile students, and mobile female students scored higher than non-mobile female students.

*Recommendations for Practice*

Although the results of this study do not support current research in the field, using the framework of current research, recommendations for practice should include the following.

\* Students should be enrolled in the school immediately upon arrival at the new school. Waivers can be obtained while vaccination records, proof of residence, and required documents are verified.

\* Educators and administrators should conduct home visits as soon as possible to present families with needed resources and supplies to promote high academic success, and to begin building school-home relationships.



\* Accurate record management needs to be in place to assist students in transition. This is not limited to attendance and grade records. Pacing guides should accompany students to demonstrate the pace of the child's curriculum. This record keeping should be district wide to aid transitions within the system.

\*All stakeholders, not limited to classroom teachers and administrators, should be provided with research based professional development to focus specifically on the areas of student mobility, and culture of language learners to best ease the transition for mobile students and to benefit the structures and climate of the educational institution.

### *Recommendations for Further Research*

The analysis of data in this study was not supported by current research related to student mobility and success; therefore, it is recommended that the following research be conducted:

\*Additional research be conducted relating to the experiences surrounding residential mobility. However, future analysis of similar findings should consider the limitations within the study itself. Because of the population, complete student records were difficult to find. Incomplete records had to be removed from the sample. Also, it is unknown why students move. The experiences surrounding mobility are unclear.

\*To fully understand the significance of the problem, the researcher must be able to analyze the causes and background situations creating the residential moves (Pane et al., 2008). For this specific population, phenomenological studies evaluating the community and relationships within the population could reveal qualitative data to explain the successes, and in turn lead to funding and programs to further reduce mobility in communities where mobility is more prevalent. A researcher should consider the community in which these students live to

better understand why only 39 percent of the population is mobile, specifically focusing on what the school district is implementing. Understanding why families in this district, unlike districts of similar demographics, remain in their schools and homes could be a framework for necessary research. Ultimately this research could lead to programs and funding in higher mobility areas.

\*Program evaluation of the multitude of systems in place to aid mobile families would yield a wealth of data on the experience surrounding residential mobility.

\*Future research should include educational data mining. Utilizing these banks of data can offer clarification to researchers seeking to further investigate the nature of mobility for students. Because of the large volume of data (and the nature of mobility) necessary to determine statistical significance, repositories can decrease the time required in gathering data (Baker, 2012; Romero & Ventura, 2013). This should connect to a comparative study between WIDA and TCAP scores for each ELL student.

Finally, ELL and migrant programs in place in this district were not factored into the study. Examining how all stakeholders assist this population of students could identify why the data findings were not supported by current research.

### *Conclusion*

Research on school mobility are currently aligned with the following two major areas: mobile students perform lower academically and socially than non-mobile students (majority), or mobile students benefit from mobility when the residential move is a direct result of upward mobility for the family (National Research Council, U.S., Beatty, 2010.) In relation to Latino students and mobility, poverty and the quality of educational institutions factor in to the measurement of academic success, perhaps more than mobility (Espinoza-Herold & Gonzalez-

Carriedo, 2017). The findings in this study resulted in no significant relationship between mobility and language attainment. Consequently, poverty, family dynamics, and residential experiences were not taken into consideration

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