2016

The Relationship of Students' Perceived Levels of Self-Efficacy and Language Development

Alisa Ann Wargo
Walden University

Walden University

College of Education

This is to certify that the doctoral dissertation by

Alisa Wargo

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Wade Smith, Committee Chairperson, Education Faculty
Dr. Deanne Otto, Committee Member, Education Faculty
Dr. Christina Dawson, University Reviewer, Education Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

Abstract

The Relationship of Students' Perceived Levels of Self-Efficacy and Language

Development

by

Alisa Wargo

MA, City University, 2004

BA, Washington State University, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education: Curriculum, Instruction, and Assessment

Walden University

December 2016

Abstract

The problem addressed by this study was the relationship created by mandated English language curricula and state standardized tests and students' perceived levels of self-efficacy. Vygotsky's theories on thought and language development and Bandura's theories on self-efficacy were used as a theoretical lens for this study. The research question concerned the relationships between students' perceived levels of self-efficacy, gender, age, and grade point average (GPA) and language development when learning within a standards-based test-driven environment. The ELA portion of the State High School Exit Exam (SHEE) generated language development scores. The General Self Efficacy (GSE) scale was the survey instrument used for this study. The GSE is a 10-item scale, and each item is ranked on a 4-point scale (1-*Not at All True*, 4- *Exactly True*). The scores for each item are then added together for a total score between 10-40. Cumulative GPA, student age, gender, and language proficiency scores from the ELA portion of the SHEE were used as variables in this study. Language proficiency scores were used as a progress indicator for students' language development. Language proficiency (ELA SHEE scores) was measured an interval scale between 275-450 (350 = passing, 382 = proficient, 405 = advanced). A multiway ANOVA was conducted. According to study results, there was not a statistically significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based test-driven environment. There are aspects of recent curriculum trends that seem to be helping students reach state proficiency goals while also building personal levels of self-efficacy.

The Relationship of Students' Perceived Levels of Self-Efficacy and Language

Development

by

Alisa Wargo

MA, City University, 2004

BA, Washington State University, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education: Curriculum, Instruction, and Assessment

Walden University

December 2016

Dedication

To my dad and my son: my past, present, and future.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

In this chapter, I provide an introduction to the quantitative study on the possible relationship between students' perceived levels of self-efficacy and language development. I include background information related to the research on self-efficacy and language development, present the problem created by mandated curricula on student self-efficacy and language development, and discuss the purpose of exploring the possible relationship between students' perceived levels of self-efficacy and language development, Vygotsky's (1986) theories on thought and language development, as well as Bandura's (1997) theories on self-efficacy, will be presented as the theoretical framework shaping this study. The quantitative nature of the study will be discussed, as well as definitions, assumptions, delimitations, and limitations. The result of this study can be used to advance knowledge in student self-efficacy and language development within test-driven environments as well as contribute to social change by providing new ways to consider language development within a standards-based environment while still considering individual student needs. A brief summary of the chapter will also be provided.

Background

Recent curriculum standards are shifting in order to meet new expectations regarding what students should be able to do and how teachers should be helping them gain these new skills (Banegas, 2011; Costello, 2012; Parks & Bridges-Rhoads, 2012; Téllez & Manthey, 2015). Although curriculum ideals are shifting, there is still an increased focus on preparing students for standardized tests (Ainsworth, 2012; Costello,

2012; Craig, 2012). Through previously amplified concentration on test preparation, the attentiveness on individual student development might be lacking due teachers' inability to focus on standardized curriculum while still differentiating instruction for the individual student (Ebanks, 2012; Mora, 2011; Ong, 2011). As curriculum trends continue to evolve, it is an opportune time for educators to begin integrating components to help bolster aspects of individual student development, which may improve student levels of self-efficacy and language development (Benevides, Corkett, & Hatt, 2011; Kirmizi & Kirmizi, 2015).

Researchers such as Benevides, Corkett, and Hatt (2011) and Kirmizi and Kirmizi (2015) provided insight into the ways that student levels of self-efficacy can impact levels of reading and writing, and Sani and Zain (2011) explored the effects of a nonsupportive second language learning environment on second language reading attitudes, self-efficacy for reading, and reading abilities, offering a platform to consider the potential impact of curricula lacking the proper self-efficacy supports necessary for language development. Yang and Wang (2015) showed a significant increase in language learning self-efficacy when students are directly taught language learning strategies. Students then continued to apply learning strategies to new concepts.

Demonstrating strategies for effectively meeting mandated standards while still meeting student needs, Mills (2002) offered a project-based learning model focused on language development while building self-efficacy and reaching required standards, and Zweip, Straits, Stone, Beltran, and Furtado (2011) studied a model integrating English language development into science classrooms. Park, Tsai, Liu, and Lau (2012) focused

on how supporting first language development can increase language proficiency levels in both first and second language development, which offers support needed to foster an environment where students can develop their own self-efficacy and language development needs. Wang and Rajprasit (2015) showed that both low and high levels of second language learners believe that the English language can be learned by anyone as long as the appropriate resources, time, and practice are made readily available.

In an environment where test data drive the development of curriculum and classroom practices, Sing and Rajalingam (2012) highlighted the importance of writing apprehension levels and self-efficacy beliefs on writing proficiency in an attempt to find a balance between what is best for student learning and development and meeting mandated requirements. Kirmizi and Kirmizi (2015) suggested that writing self-efficacy, anxiety, and performance is negatively affected by teacher feedback and time constraints. Finding a balance between student learning and mandated requirements is important to the field of education as the goal of public education is to help students reach mandated proficiency levels. Therefore, in this study, I addressed the relationship created by mandated English language curricula and state standardized tests by investigating the relationships between students' perceived levels of self-efficacy and language development.

Problem Statement

In this study, I examined the relationship between mandated English language curricula and state standardized tests and students' perceived levels of self-efficacy. This relationship needed to be explored to help strengthen student individual development

while still maintaining and supporting the integrity of standardized goals. Many scholars have highlighted the difficulties found in meeting students' individual learning needs and improving self-efficacy while also meeting instructional strategies (Benevides, Corkett, & Hatt, 2011; Kirmizi & Kirmizi, 2015; Téllez & Manthey, 2015). Student levels of self-efficacy on language development, and current practices used to build levels of self-efficacy, needed to be studied in order to identify opportunities for teachers to integrate individualized self-efficacy building opportunities for students into new curricula (Ainsworth, 2012; Costello, 2012; Craig, 2012, Ebanks, 2012; Kirmizi & Kirmizi, 2015; Mora, 2011; Ong, 2011). Although there is a better understanding of how scripted curricula meant to prepare students for standardized tests have failed to take into account individual student development, and how they lack opportunities to develop student self-efficacy, there is a gap in the literature regarding teaching practices and how student language development and self-efficacy might be directly affected. Without the ability to bolster self-efficacy in the classroom, skills such as reading comprehension, conversational dialogue, and literacy might be hindered. Individual levels of self-efficacy can affect all areas of literacy development and social interaction, while developing reading skills depends on developing a command of the language. Individuals begin to understand and develop language through social interactions (Letts, Edwards, Sinka, Schaefer, & Gibbons, 2013; MacWhinney, 2010; Matsuda & Friedrich, 2011; Solheim, 2011; Xiao, 2014). While these scholars emphasized the effect of self-efficacy on learning, they did not explore the relationship created between mandated language learning curriculum and student self-efficacy.

Purpose Statement

The purpose of this quantitative study was to explore the relationship between high school students' perceived levels of self-efficacy and language development. The possible relationship tested was between students' perceived levels of self-efficacy (dependent variable measured by the GSE student surveys [Schwarzer & Jerusalem, 1995]) and language development (independent variable measured by the Spell Out Phrase [SHEE ELA] student test scores [Spell Out Phrase [CDE], 2015]). The variables explored were student gender, age, and grade point average (GPA). Reaching the individual needs of students should be considered a necessary aspect of education; however, supporting the mandated standards should be respected as well. As more research on student levels of self-efficacy and language development is conducted, it is possible that mandated standards might still be met while serving students in a more efficient manner.

Research Questions and Hypothesis

RQ1: What are the relationships between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment?

$H_0 1$: There is no significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment.

$H_1$1: There is a relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment

Theoretical Framework

Vygotsky's (1986) theories on thought and language development and Bandura's (1997) theories on self-efficacy helped shape the foundation of this study. Vygotsky highlighted the need to develop thought and language by providing an appropriate setting for individuals to experience and understand thought and language. The notion that thought and language are two separate processes that rely on one another for proper development is one of the key beliefs guiding Vygotsky's ideas. Bandura evaluated the idea of thought processes as foundational powers behind the proper development of an individual's self-efficacy. The belief that self-efficacy affects all aspects of an individual's life increases the need to foster proper development. These two standpoints allow for literacy development to be considered intertwined with the progression of an individual's thought and language and levels of self-efficacy.

Previous scholars have supported both Bandura and Vygotsky by showing the need for individualized learning experiences, which might not be typically cultivated in a test-driven environment. Corkett, Hatt, and Benevides (2011) provided insight into how levels of reading and writing can be impacted by levels of self-efficacy, suggesting the need to foster an environment that increases student levels of self-efficacy to improve reading and writing. Additionally, Park et al. (2012) emphasized the need to support first language development in order to increase language proficiency in first or second

language development, suggesting the importance of proper language development in order to increase language proficiency levels.

As applied to my study, a standards-based, test-driven learning environment should be expected to impact student levels of self-efficacy and language development, as a scripted learning environment does not typically create a setting necessary to bolster individual student needs. If a standards-based, test-driven learning environments lack the appropriate experiences necessary to help foster student growth in regards to perceived levels of self-efficacy and thought and language development, then the students will not achieve the intended growth needed to improve student learning

Nature of the Study

The nature of the study was quantitative. Quantitative research allows for relationships to be analyzed, which was consistent with the goal of this study. Analyzing the relationship between student levels of self-efficacy (dependent variable [DV]) and language development (independent variable [IV]) allowed for the exploration of differences between student perception of his or her learning capability and what his or her language development scores suggested about his or her learning. Schwarzer and Jerusalem's (1995) GSE scale was the instrument used to measure student perceived levels of self-efficacy (DV) and student ELA scores from the SHEE were used to measure language development (IV). To create a more robust analysis, gender, age, and GPA were used as variables. In this quantitative study, I shed light on aspects of recent curriculum trends that help students reach state proficiency goals while also building personal levels of self-efficacy.

Definition of Terms

Mandated curricula: Curriculum adopted and required by the district and state to be taught with fidelity inside classrooms. The purpose of this required curriculum is to help ensure that students have equal access to standards-based instruction (CDE, 2015).

Proficiency: A level of development dictated by the state as a level of an ideal level of student competence. For example, a score of 350 on the SHEE is considered passing, a score of 382 deemed proficiency, and a score of 400 is advanced. According to No Child Left Behind (NCLB), all students are expected to reach proficiency by the year 2014 (CDE, 2015).

Scripted curricula: Curriculum developed to help teach tested standards. The scripted curricula leave little to no room for teacher input and provides all necessary teaching materials and dialogue (Costello, 2012; Parks & Bridges, 2012).

Self-efficacy: An individual's belief in his or her ability to overcome a new challenge (Bandura, 1997).

Standards-based, test-driven environment: An environment with the primary goal of teaching towards a standardized test by using materials and curriculum to help do so. The goal of these types of learning environments is to improve student test scores (Costello, 2012; Craig, 2012; Parks & Bridges, 2012).

State standardized tests: State-mandated tests required for all students. Results are used to assess student proficiencies as well as determine school and district progress (CDE, 2015).

Assumptions

The following assumptions are defined to clarify aspects of the study that are believed but cannot be demonstrated to be true:

1.   Students will self-report gender, age, GPA, and ELA scores accurately and honestly.

2.   Students are familiar with state testing, previous test scores, and testing procedures.

This study was based on the aforementioned assumptions. The first assumption was that all students would self-report gender, age, GPA, and ELA scores accurately and honestly. This assumption was important to the study because the accuracy of the data collected is important to the validity of the results.

The second assumption was that students are not only familiar with the process of state standardized testing, but they are also familiar with their own scores. As standardized testing is a required component of public schools, it was assumed that students will have participated in the process. Similarly, as students have been tested before and test scores are provided to them, they should be aware of their own scores. This assumption was important to the study as self-efficacy was being measured and is a part of an individual's self-efficacy is believed to be shaped by his or her past experiences (Bandura, 1997).

Scope and Delimitations

The scope and delimitations of this study are defined to clarify aspects regarding the design of the study:

1. Voluntary student GSEs were used to gather students' perceptions on their own self-efficacy.

2. Self-reported student data from the SHEE were used to measure student language development in ELA.

3. Student gender, age, and GPAs were collected for predictor variables.

4. The target population was 11th and 12th grade students because they had already taken the SHEE and were nearing the end of their public schooling.

5. The study was limited to two public high schools from one district in an urban/rural community.

6. Bandura's (1997) theory of self-efficacy and Vygotsky's (1986) theories on thought and language were used as the theoretical framework for this study.

In this study, I examined the relationship between mandated English language curricula and state standardized tests and students' perceived levels of self-efficacy. In order to measure students' perceptions on their own self-efficacy, voluntary student GSEs were used. Schwarzer and Jerusalem's (1995) GSE was chosen because it has been used for over 20 years to measure a wide variety of population's self-efficacy, and the brevity of the survey was in the best interest of the target population. Only students in their 11th

and 12th grade year of high school were used as they have completed the SHEE. The SHEE data were used to measure student language development in ELA. Additionally, student gender, age, and GPAs were collected for use as predictor variables. Shaping the theoretical framework of this study was Bandura's (1997) theory of self-efficacy and Vygotsky's (1986) theories on thought and language. These theories were included as they provide the most appropriate lens to explore how a standardized learning environment might affect an individual's learning experience. Because state testing is required in all the state's public schools (CDE, 2015), there is potential for the results of this study to be applicable to other high schools

Limitations

The following limitations are defined to clarify potential weaknesses and biases of the study:

1. This study was limited to two public high schools from one district in an urban/rural community.

2. Student participation in this study was voluntary so all parts of this population may not be represented.

3. The population of this study was limited to voluntary participants in the 11th or 12th grade from the two high schools within the district.

4. I used self-reported student data for gender, age, GPA, and ELA scores.

5. An unanticipated limitation of this study was the low number of participants.

Due to my teaching position in one of the high schools in the school district, this study was limited to the remaining two high schools. This limitation was necessary as it prevented students from feeling coerced into participating; I was not associated with the student participation. Student participation was voluntary so all parts of the population may not be represented; all participants' data were used to help strengthen the inferential power available in the data analyses. The population of this study was also limited to students who were in the 11th or 12th grade as they completed the SHEE in the second semester of their 10th grade year. By using both the 11th and 12th grade, a larger sample was available, and the predictor variable of age could be included. However, due to the nature of the study, the number of participants was much lower than anticipated.

Significance

The results of this study can be used to advance knowledge in language development and self-efficacy in a standards-based environment. Standardized testing has become a normal method of assessment that is used throughout public school across the United States; it is in the best interest of educators to find the most effective ways to individualize education while still maintaining fidelity to the required standards. However, scripted literacy learning is ineffective and must be nonlinear and more dynamic (Short et al., 2011; Spencer, Clegg, & Stackhouse, 2012; Syrnyk & Meints, 2012; Yang & Wang 2015). This study will help inform and guide researchers in new directions to encourage the exploration of teaching language within restrictive boundaries as I found that there are aspects of recent curriculum trends that are helping students reach state proficiency goals while also building personal levels of self-efficacy.

Impact on Social Change

This study contributes to positive social change by providing new ways to consider language development within a standards-based environment while still considering individual student needs. Teachers and students are affected by mandated curricula; just as mandates cannot fit all students, they cannot fit all teachers either (De Araujo et al., 2013; Téllez & Manthey, 2015). Standardized curriculum, by nature, is hard to individualize for individual needs. However, in this study, I illuminated the impact that self-efficacy has on language development in hopes that small and effective changes can be made inside these new mandatory curricula. As Wu (2012) suggested, fostering positive beliefs through group discussion sand social interaction can increase students' perceptions towards their own cognitive abilities. Making small adjustments in the classroom might lead to big changes for individual students.

Summary

In this chapter, I provided an introduction to this quantitative study by discussing the background information on the possible relationship between students' perceived levels of self-efficacy and language development. The need to explore the relationship created by mandated English language curricula, and state standardized tests, by investigating the relationships between students' perceived levels of self-efficacy and language development was presented. The purpose of this study was to explore the possible relationships of students' perceived levels of self-efficacy through student surveys and language development with a language test. The quantitative nature of the study was presented, as well as the target population of 11th and 12th grade students from

a rural/urban public school district. Bandura's (1997) theories on self-efficacy and

Vygotsky's (1986) theories on thought and language development were introduced as the

theoretical framework. The research question was stated as the following: What are the

relationships between students' perceived levels of self-efficacy, gender, age, and GPA

predict and language development when learning within a standards-based, test-driven

environment? The goal of this study was to help shed light on the way that educators can

improve language development while still maintaining fidelity to mandated curricula.

Chapter 2 will include a review of literature supporting the themes of this study as

well as addressing the gaps in current research.

Chapter 2: Literature Review

In this study, I explored the relationship between mandated English language curricula and state standardized tests and students' perceived levels of self-efficacy. The purpose of this study was to explore the relationship between students' perceived levels of self-efficacy and language development. The variables used to bolster the analysis were gender, age, and GPA. Researchers have provided insight into how mandated curriculum, language development, and self-efficacy interact in a variety of different settings, as well as, how gender, age, and GPA are factors in education and should be considered in future research. While many scholars offer insight into different components of this study, there is a gap in the research where all the specific components are included.

This chapter will begin by providing a description of the strategies used to find the literature and an explanation of the theoretical foundation from which the study was built. Secondly, the literature review will be organized by the three main overarching categories of curriculum, language development, and self-efficacy and education. Within those broader sections, each category will include literature on relationships between the predictor variables of gender, age, and GPA and the broader categories themselves.

Literature Search Strategy

The following databases were the primary search engines used to find appropriate literature for this review: Academic Search Complete, ProQuest, and ERIC. The search was guided by the overarching categories of curriculum, language development, and self-efficacy and education. More search phrases were used in addition such as *mandated*

curriculum and English; mandated curriculum and ELA; mandated curriculum and English language; curriculum, gender, standardized tests; curriculum, gender, English language; curriculum, age, standardized tests; curriculum, age, English language, curriculum, standardized tests, GPA, mandated, scripted; curriculum, GPA, English; language development, standardized tests; language development, standardized tests, test prep; language development, standardized tests, English; language development, self-efficacy; language development, standardized tests, gender; language development, gender; language development, age, standardized tests; language development, standardized tests, GPA; language development, GPA; self-efficacy, education, English language; self-efficacy, gender, curriculum; self-efficacy, age, curriculum; and self-efficacy, GPA to allow for an exhaustive search. I systematically included all of the predictor variables within each broader category. Search specifications were set to allow only for peer-reviewed articles published no earlier than 2011 to ensure the most current research leading up to the curriculum switch from NCLB to common core. In addition to current research, seminal pieces by Vygotsky and Bandura were used to provide a theoretical framework to the literature.

Theoretical Foundation

The theories used to provide a lens in this study included Vygotsky's theories on social development and thought and language development, as well as Bandura's theories of self-efficacy, primarily focusing on thought and language development. Although I considered the literature with both theories combined, it is critical to first understand and

consider the theories independently before considering they ways they might work intertwined.

Vygotsky is known for theories on social development; however, in this study, I focused on the theories of social development and thought and language in regards to education. Vygotsky's (1986) theories on thought and language development provide a backdrop from which to consider the aspects of language development in an educational setting. Vygotsky claimed that thought and language are separate processes that rely upon one another to achieve proper development. Vygotsky stressed the notion that the formation and function of thought and language are independent but function dependently. These two processes must be considered both together and separate in order to ensure proper functioning and development.

Vygotsky (1986) suggested breaking down thought and language development into the smallest component possible to fully understand the progression of development and the interaction between these two processes. According to Vygotsky, word meaning is the smallest and most essential aspect as it generalizes thought as well as allowing for appropriate social interaction. These word meanings generalize reality and the experiences in which an individual is living. Without the ability to create a word meaning, a person cannot have a thought or express a thought, and social interaction is necessary not only for the development of a word meaning, but for the expression of the idea itself (author, year). These word meanings allow for ideas to be created and expressed. As an individual's thought process and language development becomes more

advanced, the way an individual perceives him or herself becomes a component of development.

Bandura's (1997) theories of self-efficacy provide a lens from which to consider individual development, particularly in the realm of language development. Bandura suggested that an individual's self-perception plays a role in proper development. The way an individual thinks about or perceives his or her own abilities plays a part in his or her ability to develop and progress as an individual. Bandura suggested that there are four ways these perceptions are affected: enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states.

According to Bandura (1997), enactive mastery experiences provide an individual with multiple opportunities to experience successes, as well as failures, to ideally learn how to effectively overcome obstacles. Next, vicarious experiences allow an individual to witness someone else achieving or completing a task, or possibly the negative opposite, allowing for the individual to imagine his or her own abilities. Additionally, verbal persuasion, also considered social influence, is the ability for verbal encouragement or dissuasion to affect an individual's self-perception. Lastly, physiological and affective states influence an individual's self-perception by the associated feelings or thoughts accompanying an experience, such as sweaty palms, shaking hands, and so on. These categories can be presented, or be encouraged or discouraged, in a variety of educational settings.

When considered together, Vygotsky (1986) and Bandura (1997) create a lens to consider individual development. Vygotsky and Bandura claimed that proper thought

and language development rely on social interaction to allow for experiences and ideas to be generalized and articulated; additionally, the way an individual perceives his or her own experiences, abilities, or reality could shape the way his or her own thoughts and language develop. The intricacies of language development and self-perception are often overlooked in the current world of mandated education.

Previously Applied Theory

When exploring new curriculum trends through the lens of Vygotsky and Bandura, there are multiple commonalities to be explored. Some scripted curriculum fails to meet individual needs due to a focus on task completion rather than student thought processes (Barton & Sakwa, 2012; Parks & Bridges-Rhoads, 2012). Limiting the educational focus of a curriculum to learning tasks targeting learning standards leaves little or no room for teachers to target individual learning needs. Individual learning needs might require a less linear approach then a scripted curriculum can provide, and students might vary from needing more time on a particular task, to needing more time to process new thoughts and ideas, to needing more opportunities to interact and discuss, and so on (Parks & Bridges-Rhoads, 2012; Spencer et al., 2012).

Allowing for social interaction by including child-centered approaches allows students the opportunity to gain more confidence in their own thinking and self-efficacy towards learning (Cianca, 2011; Mancilla-Martinez & Lesaux, 2011; Wang et al., 2012). Ideally, teachers should take into account that some students need to focus on different skillsets, will respond to different types of instruction, and have different sets of background knowledge. Knowing that each student can potentially benefit from different

types of instruction in a multitude of ways should encourage the development of a multifaceted standards-based approach rather than a set learning path. Both Vygotsky (1986) and Bandura (1997) stressed the importance of allowing students to experience their learning in a variety of ways and that social interaction is not only a key component to language development, but it is also a component of human development.

Bandura (1997) suggested that self-efficacy builds through several facets: witnessing another individual's success at a given process and through an individual's own experiences. While students need the opportunity to witness language in use and have the opportunity to use language appropriately and successfully, teachers also need to be able to transfer their own confidence in teaching and encourage high rates of participation. By providing teachers with professional development to bolster their own self-efficacy in teaching language throughout all content areas, student levels of participation and learning can also increase (Bostock & Boon, 2012; Shanahan & Shea, 2012). Teachers who are confident in their ability to infuse language instruction throughout their curricula might be more likely to increase practical and effective opportunities for students to learn and develop language; however, when teachers are held to scripted or paced lessons that focus primarily on skill sets, the ability to differentiate for individual learners becomes far less likely.

Learning within context, content relatedness, and well-designed classroom environments are central not only to learning but to increasing levels of self-efficacy and student buy-in (Bozdogan & Ozen, 2014; Topkaya, Zehir, & Yavu, 2011; Xiao, 2014). Student self-efficacy should be considered a fundamental building block in education,

and when language and thought development are a primary focus, self-efficacy must be considered a leading factor for success. Language proficiencies increase, levels of self-efficacy also increase, which helps create a positive and effective learning cycle; furthermore, these proficiencies can be bolstered by including modern technology in meaningful ways (Adalier, 2012; Bozdogan & Ozen, 2014; Topkaya et al., 2011; Xiao, 2014; Yang, 2012). Using technology or familiar ancillary materials can help students build new skillsets using familiar tool. Self-efficacious language learners will develop language more successfully than their counterparts because they have the confidence in their own tools to do so.

While technology can be a useful tool to help increase student self-efficacy, learning strategies and motivation are also areas that can be explored with Bandura's (1997) theory. Students with higher levels of self-efficacy have higher levels of intrinsic motivation and use more learning strategies when faced with learning tasks they feel they can successfully complete (Wu, Lowyck, Sercu, & Elen, 2012; Zhang & Guo, 2012). Students with high levels of self-efficacy are able to access their own learning tools and motivation to find ways to complete new and complex learning tasks. However, language can be a barrier to increasing levels of self-efficacy causing low levels of achievement, which leads to low levels of self-efficacy, and this negative cycle can continue without proper intervention (Dye, Williams, Kemper, McGuire, & Aybar-Damili, 2012; Jungert & Andersson, 2013; Karimi, 2012; Sani, Murad, & Zain, 2011). Knowing that self-efficacy can cause either a positive or negative learning cycle for

students and infusing instruction with a wide variety of self-efficacy building

opportunities is difficult to do within a confined curriculum.

Vygotsky (1986) suggested that thought and language are two separate processes

that rely and develop together; however, without the proper environment and

experiences, both areas can become deficient. One of the contributors to the proper

development is the ability to interact and communicate with others in a social setting.

Bandura (1997) suggested that these types of experiences can either bolster or diminish

an individual's self-efficacy. Self-efficacy is an integral component of thought and

language at all points of development. High levels of self-efficacy can influence high

levels of achievement, and language is a predictor in both perceived levels of self-

efficacy and levels of academic achievement. As an individual progresses through the

education system, the student should continue to experience increasing levels of self-

efficacy and academic achievements. Prior academic achievements and levels of self-

efficacy have been found to provide partial explanations for student achievement in

higher education (Cassidy, 2012). Without the proper instruction and development of

language, future achievements become more difficult to attain; however, with a more

individualized approach to education, teachers will be able to effectively differentiate to

help foster individual student development.

Rationale

Vygotsky's (1986) theories on thought and language development and Bandura's

(1997) theories on self-efficacy helped shape the foundation of this study. Although

Vygotsky focused on how developing thought and language through appropriate settings

for individuals to experience and understand thought and language, Bandura suggested that self-efficacy is necessary for individuals to appropriately and successfully develop. According to these two theories, literacy development is intertwined with the progressions of an individual's thought and language and levels of self-efficacy. I used these theories to consider the relationship between students' perceived levels of self-efficacy and language development when learning within a standards-based, test-driven environment.

Curriculum

As policymakers strive to find a solution for improving low test scores and increasing student achievement in all subject areas, mandated curriculum has become a widespread public education experience. These scripted or paced curricula offer a wide variety of resources for teachers; however, they leave the teachers lacking ownership in their classrooms and feeling more connected with the materials and less with individual students (Costello, 2012; Craig, 2012). Opportunities for students to learn are now dictated by a curriculum, which is shaped by the individual teacher's instructional practices (De Araujo et al., 2013; Parks & Bridges-Rhoads 2012). The idea of scripting a perfect curriculum to increase student achievement falls short not only on the side of teacher implementation, but also on allowing for proper developmental opportunities.

Following a rigid curriculum forces the learning focus to become task-oriented rather than thought-oriented, which eliminates the opportunities to mix the unique classroom needs with the required standards (Costello, 2012; Parks & Bridges-Rhoads, 2012). Student needs should be the focus of education; however, balancing the learning

needs of individuals with the expectations of policymakers has become a difficult but

necessary component of teaching. Since the implementation of mandated curriculums,

administration and district consultants have become a more present and often negative

force in the education arena; these restraints trickle down through the teachers' morale

and into the classroom, preventing teachers from creating a dynamic classroom

environment that encourages joint participation and the opportunity to address individual

learning needs (Craig, 2012; Spencer, 2011). Although the ultimate goal of mandated

curriculum is to help bolster student achievement, the intricacies of human development

are lost in the script.

   To explore how mandated curriculum can shape a classroom and affect the

learners within, scholars have focused on the qualitative experiences of teachers

implementing these new interventions. The methods most common among these studies

is to gather information regarding teacher experiences within new programs, their own

perceptions of their teaching, and how curriculum changes instruction through teacher

journals, interviews, and observations (Costello, 2012; Craig, 2012; De Araujo et al.,

2013; Parks & Bridges-Rhoads, 2012; Spencer, 2011). These researchers offered insights

into the middle person between curriculum makers and students, allowing for a better

understanding of how the intentions of mandated curriculum do not necessarily make it to

the students.

   Approaching the problem created by mandated curriculum through teachers'

perspectives gathers valuable information regarding what is currently working and what

is currently lacking for the individuals responsible for delivering education to students.

Costello (2012) and Craig (2012) used a single teacher's perspective in their studies; although this allowed for an in-depth look into how curriculum implementation has shaped their teaching experiences, it only allowed for one perspective. However, these individual experiences seem to be replicated in De Araujo et al.'s (2013), Parks and Bridges-Rhoads's (2012), and Spencer's (2011) studies that include multiple teachers, interviews, and student/teacher interaction allowing for a more robust approach. These scholars have helped to identify a common thread between how teachers' experiences implementing scripted material leaves teachers feeling restricted, while also leaving them unable to reach individual student needs (Costello, 2012; Craig, 2012; De Araujo et al., 2013; Parks & Bridges-Rhoads, 2012; Spencer, 2011). Implementing a mandated curriculum affects not only the teacher experience, but the quality of student education; therefore, more should be done to increase the likelihood of a single curriculum being able to improve student achievement while maintaining fidelity to individual teaching and learning needs. I stopped reviewing here due to time constraints. Please go through the rest of your chapter and look for the patterns I pointed out to you. I will now look at Chapter 3.

English Language Curriculum

While mandated curriculum affects all subject areas, one of the focuses of this study is on language development. Using English language curriculum as another focal point allows for another angle from which to consider curriculum interventions. While language curriculum can be high quality and well-balanced, it still cannot take into consideration the individual needs of teachers, students, and cultural subgroups which

reinforces the notion that curricula can be useful as a guiding tool but should not be considered a "one size fits all" answer to language learning (Banegas, 2011; Nguyen, 2013; Okebukola, 2012). Access to well-developed language curriculum is necessary, but considerations for well-rounded language curriculum should come from a pedagogical standpoint as well as considering student needs and levels of achievement (Banegas, 2011; Cha & Ham, 2011; Nguyen, 2013; Matsuda & Friedrich, 2011). Studies suggest linear language curriculum can offer structure, increased teacher confidence, and ease of use but, it also requires a heavy reliance on textbooks and pacing, leaving out opportunities for teachable moments or social education components which are critical to student language development (Ainsworth, 2012; Li & Edwards, 2013; Ma, 2012). Creating a high quality and well-balanced language curriculum becomes more and more complicated the more each participant and recipient is considered.

There are a wide range of studies that explore the implementation of language curriculum. Ainsworth (2012), Banegas (2011) and Li and Edwards (2013) chose to focus on the qualitative experiences of teachers by focusing on how teachers implemented new curriculum. While Ainsworth (2012) focused on what four 1st grade teachers experienced while implementing a new ELA curriculum; Li and Edwards (2013) explored how 48 English teachers implemented learnings from an innovative teaching practices curriculum. These studies offer different perspectives to consider how curriculum can influence teachers to be task driven and how the quality of instruction they deliver to their students can be hindered not allowing for innovative or creative learning experiences (Ainsworth, 2012; Banegas, 2011; Li & Edwards, 2013). Adding to

the insights on language curriculum provided from teacher perspectives, Nguyen (2013) and Okebukola (2012) explored their studies through quantitative measures by examining teacher views on early literacy curriculum and curriculum used to train EL teachers and found more contextual knowledge and better resources are necessary to implement curriculum properly. While these studies provide a more specific teacher perspective to the issue of mandated curriculum, there are still other important factors to consider.

The actual textbooks and curricula themselves offer relevant data to consider and can provide a glimpse into how language curriculum has developed. By systematically studying five historical periods from the year 1900-2005, Chan and Ham (2011) were able to identify and analyze the spread of English curriculum noting how language is a critical component of identity. By analyzing historical trends, textbooks, and curriculums, the importance of developing proficient language abilities becomes even more evident and the problem of finding a successful curriculum to do so more urgent (Chan & Ham, 2011; Ma, 2012; Matsuda & Friedrich, 2011). Clearly, there is a need for language curriculum; however, finding a way to balance the needs of learners, the capabilities of the teachers, and the expectations of policymakers has become a critical issue.

Approaching the study of language curriculum through the eyes of teachers and the paths of textbooks and curriculum offers two important perspectives: teachers are able to identify the strengths and weaknesses in the curriculum as practitioners, while documents allow for historical trends and patterns to be explored. The strength in studies such as Ainsworth (2012), Li and Edwards (2013), and Okebukola (2012) is in the ability

to discover where teachers feel they need more support in order to successfully teach language in a variety of classroom settings. These findings provide a place for curriculum developers to start when attempting to adjust current curriculum development trends. As noted by the studies themselves, one of the major issues of teachers implementing curriculum is found in the differing perceptions of understanding how the curriculum should be delivered, similarly, these teachers can only offer their own experiences, not the experiences of all educators (Ainsworth, 2012; Li & Edwards, 2013; Okebukola, 2012). Exploring trends and patterns in past and present language curriculum documents helps reiterate the feelings of teachers and their experiences while also adding a potential roadmap to the past of what has already been attempted and to what is currently being practiced. The strength in studies such as Banegas (2011), Cha and Ham (2011), Ma (2012), and Matsuda and Friedrich (2011) is in the amount of textual evidence that is explored that helps validate the concerns of current practitioners. While these studies offer an excellent starting place for an overall survey of current mandated curriculum implementation trends, they do not offer specific insights into students' classroom experiences, curricula specifically designed for standardized test preparation, or other specific classroom variables.

Curriculum, Test Preparation, and Gender

Currently, there are many different curricula designed to prepare students for a multitude of mandated requirements and similarly, standardized tests have become an ever growing area of contention. There is evidence that focused test preparation interventions can help students increase their test performance when offered in shorter

sessions, especially when working with minority students (Ebanks, Toldson, Richards, & Lemmons, 2012). If test preparation interventions were to be kept as separate intensive programs perhaps they would remain successful. However, there is also evidence of student boredom increasing when content seems meaningless and test preparation has a tendency to lose the ability to engage students as it typically is not student driven, lacks contextual meaning, hands on activities, and has too narrow of a scope (Mora, 2011). Complicating the problem of integrating test prep into curriculum, is the issue of how gender can help or hinder student performance.

Some studies suggest that gender stereotypes are still represented in some curriculum and very difficult to avoid when teaching ESL due to cultural differences (Barton & Sakwa, 2012; Johnson & Chang, 2012). By not fairly representing all students, curricula that is developed with gender bias is still not reaching individual student needs, and this becomes more critical when considered against a high stakes testing backdrop. Ong, Williams, and Lamprianu (2011) suggest that different testing items function differently for different genders and were able to provide evidence showing boys finding more ease when taking a test without gender considerations. While this is one study, in one subject area, the findings do bring to light the importance of considering not only what curriculum is teaching students about their individual identities, but what standardized tests are actually testing.

The approach to investigating the effects of test preparation curricula can and should vary to offer many perspectives to consider. On a successful note, Ebanks, Toldson, Richards, and Lemmons (2012) found significant quantitative increases in

minority middle school aged students after implementing an intense 5-week free test prep intervention offering group guidance and mentoring. There is a definite need to create intervention programs that can help all students be successful on mandated state tests, however, by infusing these programs into already scripted curricula it seems to cause more problems than not. Considering the extent classroom curriculum and pedagogy affects student stimulation, Mora (2011) conducted an ethnographic study spanning 2.5 years with 30 urban middle school students which offers insight into how students lose interest in less meaningful and active learning. While the shorter intensive intervention program studied in Ebanks et al., (2012) study demonstrated significant student gains, Mora's (2011) longer study shows how these types of scripted learnings can take a toll on student motivation. It seems clear that test preparation can be successful, but when it begins to take away from student stimulation or motivation towards their regular content area, it may no longer be beneficial.

Additionally, the methods behind Ong, Williams, and Lamprianu's (2011) quantitative study utilizes three math subtests taken by 1029 boys, 971 girls, age 11 and demonstrates the need to consider the existing gender bias in test questions. These biased questions draw attention not only to what is being tested on a standardized test, but also what is being taught in standardized curriculum. Following this notion, by analyzing ESL curriculum content, teacher lessons, and teacher observations, other studies suggest that gender bias is also present in curriculum content and instruction (Barton & Sakwa, 2012; Johnson & Chang, 2012). These findings are limited in the sense that they focus on one subject area test, one ethnographic study, or one intensive program, however, the

findings presented seem to go against the idea of creating mandated curriculum to help all students perform better on standardized tests. The goal of these scripted curricula and standardized tests should be to increase individual student learning and achievement, however, by creating a general solution to a general test, any notion of individual differentiation becomes lost.

Curriculum, Test Preparation, and Age

While not many studies focus on mandated curriculum, test preparation, and age, there are several studies that offer insight into each of these components. Young learners in diverse student populations are found to be limited by standardized testing processes and accessibility and benefit more from a student centered approach, particularly in regards to language learning (Dalton & Brand, 2012; Cianca, 2012). Not only does a more diverse approach to teaching help reach more students, but a more diverse approach to testing might also be necessary. By adding more opportunities for young learners to interact, not only with teachers and peers but with family and community members as well, student engagement and language learning success will increase (Dalton & Brand, 2012; Carreira & Kagan, 2011; Cianca, 2012). Unfortunately, scripted curricula, particularly test prep curricula, do not allow for the types of learning opportunities necessary to increase student engagement, and if they do, they seem to get lost amongst policymakers and teachers. Many curricula are developed with affective learning skills embedded but are not necessarily included in classroom instruction, as the focus becomes getting through the material rather than fostering critical thinking (Parks & Bridges-Rhoads, 2012; Peiser & Jones, 2012). As educators pick and choose what they deem

appropriate to their classroom instruction, while still trying to maintain fidelity to the prescribed curriculum and keep students engaged, important aspects of learning can be forgotten.

By reviewing current curriculum trends, the notion of creating nontraditional methods of testing and curriculum implementation needs consideration. To best serve young language learners, offering curriculum robust and well developed with multiple means of engagement is critical, as well as, teachers and policy makers holding true to these intended goals (Dalton & Brand, 2012; Peiser & Jones, 2012). Similarly, gathering data from a US census survey report offers another angle from which to consider how curriculum might be functioning for language learners. Carreira and Kagan (2011) coded a census report to gather information on 1731 young second language learners and were able to identify the need for home language practice at home suggesting that language learning cannot fall entirely on the hands of the classroom teacher and a scripted curriculum. Also focusing on younger students, Peiser and Jones (2012) study offered a more traditional approach to exploring how social interaction in language learning increase students' engagement and success by using observations and monitoring language use. Clearly, more engagement is needed to increase the effectiveness of language learning and while language learning is thought of as a primary developmental skill, more studies focusing on older youth would be helpful to gain insight on the effectiveness of mandated curricula.

Curriculum and GPA

While there are many different types of curricula developed and different types of courses created in attempts to help improve student achievement, often it seems the focus is on classes developed to increase student success on mandated state testing. There are other aspects of curriculum to be considered such as how different components might help students increase self-efficacy or how their GPA or previous achievements might shape their successes. Martinez, Kock, and Cass (2011) suggest students with higher GPAs have lower levels of writing anxiety and increased levels of writing self-efficacy; while Whede-Roddiger, Rolando, Anderson, Arrambide, O'Conor, and Onwuegbuzie (2012) suggest students with more exposure to advanced curriculum such as pre AP/AP programs tend to have higher GPAs and test scores. These two studies seem to have differing focuses; however, they both offer insight into how students who are successful tend to remain successful. By offering components to help build student self-efficacy such as more opportunities to experience successful writing and more exposure to challenging course work, students are more prepared and more successful (Martinez et al., 2011; Whede-Roddiger et al., 2012). These findings help draw light on the need to include more opportunities for students to practice language and learning skills to help encourage student confidence in their own achievements.

Offering insight into secondary and postsecondary student experiences, Martinez et al. (2011) and Whede-Roddiger et al. (2012) both use quantitative methods to explore how specific curriculum components might affect student success. By focusing these studies on high school and beginning college aged students, the data collected allows for

insight into what aspects of curriculum might be more effective than others for students transitioning out of traditional public schooling and onto post high school education. Both studies suggest self-efficacy can be bolstered by providing students with more opportunities to successfully practice new skills, and both studies suggest higher levels of self-efficacy lead to higher levels of achievement (Martinez et al., 2011; Whede-Roddiger et al., 2012). While these studies are small and limited in scope, their findings are still helpful as they add understanding to what particular features are potentially more useful than others to include in new curriculum

Language Development

Many studies offer insight into how standardized tests drive curriculum and these scripted curricula might shape the way teachers instruct and students learn; however, another important aspect to consider is student language development. There are many studies that examine how standardized tests are failing to consider a multitude of student language needs and potentially setting students up for failure; but, their findings also help highlight areas where students with language development delays might struggle and need additional support (Hough & Kaczmarek, 2011; Letts, Edwards, Sinka, Schafer, & Gibbons, 2013; Paradis, Schneider, & Sorenson Duncan, 2013; Mancilla-Martinez & Lesaux, 2011; Spencer, Clegg, & Stackhouse, 2012; Syrnyk & Meints, 2012). Whether these studies focused on language learning adoptees, homes with low levels of parental education, ELL with language impairments, language minority students, or students from low socioeconomic areas, the results were always similar suggesting that current standards are not accurately serving and assessing all students' language development

needs (Hough & Kaczmarek, 2011; Letts, et al., 2013; Paradis, et al., 2013; Mancilla-Martinez & Lesaux, 2011; Spencer, et al., 2012; Syrnyk & Meints, 2012). While standardized tests may accurately assess an average student's language development, there are too many sub groups inaccurately and unfairly measured and taught with ineffective standardized materials.

By quantitatively gathering data on a wide array of language learners, researchers are able to explore some of the language development issues that are present in current education practices and how they are assessed. Language learners who are lacking support in their homes, whether it is because of a differing home language or the lack of parental education or resources, are testing lower than their peers (Hough & Kaczmarek, 2011; Letts et al., 2013; Spencer et al., 2012). These students are exposed to the same standardized tests as their peers; however, they do not have the skills to successfully progress through their language development without proper support. Studies have shown socioeconomic background and parental education can have a negative effect on language development and there may be unidentified language difficulties within these subgroups (Letts et al., 2013; Mancilla-Martinez & Lesaux, 2011; Spencer et al., 2012). Additionally, the achievement gaps between mono-language learners and language minority students or bilingual students, is significant and transitional support from home language to second language is necessary to help support language learners (Hough & Kaczmarek, 2011; Mancilla-Martinez & Lesaux, 2011). Finding a solution to properly instructing and assessing all types of languages learners has been an ongoing problem in

education; and yet, there are even less explored areas of language development that might affect any type of language learner regardless of their language background.

Language Development and Self-efficacy

Several studies explore the relationship or interaction between language development and self-efficacy and offer a wide variety of important considerations for any educational setting. Language development is a necessary component of all learning; whether that learning is taking place in a teacher training program, a preschool setting, or a K-12 standards based classroom, an individual's self-efficacy towards their own language development, or ability to teach language, has been shown to have a significant impact on learning and productivity (Hiver, 2013; Dalton, 2011; Dammeyer, 2012; Shanahan & Shea, 2012). Regardless of the setting or participants, the belief that one can use language appropriately is a critical component to communication and social interaction. Dammeyer (2012) suggested all aspects of language development work together but require interaction to be effective, and Hiver (2013) furthered this notion by suggesting the more self-efficacy teachers have towards their own ability to teach language, the more they will participate and receive high participation within their classrooms, which will help bolster student self-efficacy towards their language and increase language skills. Self-efficacy helps or hinders students from their own individual belief systems as well as the belief systems internalized within their teachers.

Evaluating possible connections between language development and self-efficacy from a variety of perspectives and experiences is necessary when trying to identify possible ways to increase student success. By using teachers as study participants,

researchers have been able to identify the importance of increasing teacher confidence to increase student confidence and learning, as well as find meaningful and successful ways to encourage the incorporation of language development instruction in all content areas (Hiver, 2013; Shanahan & Shea, 2012). Similarly, observing and analyzing students, and reviewing extensive research literature, Dalton (2011) and Dammeyer (2012) posit the idea that language development is an imperative piece to all learning and interaction. These suggestions illuminate how complex language development is and how helpful a high sense of self-efficacy can be both from the side of the student and the teacher. Some studies demonstrate that content standards, instructional strategies, and teacher instruction can all be combined to help support language learning and increase student interaction, self-efficacy, and language development; however, other studies also suggest pragmatic language development is still a critical element in student learning (Hiver, 2013; Dalton, 2011; Dammeyer, 2012; Shanahan & Shea, 2012). Clearly, the relationship between language development and self-efficacy is complicated with many unknown variables left to explore.

Language Development and Gender

Some research provides highlights to the intricacies of language development by exploring how gender can play a role. Several studies show female students scoring higher on varying language assessments but particularly in areas of vocabulary development and expressive vocabulary (Chonchaiya et al., 2013; Henrichs et al., 2013; Rescorla, Lee, Oh & Kim, 2013; Marjanovic-Umek, Fekonja, Podlesek & Kranjc, 2011). Language learning is complex, and these higher gains in vocabulary and language offer a

few differing pieces of development to consider: Henrichs et al., (2013) study shows signs that language development allows for more complex thinking and cognitive development which allows for more complex behavioral and emotional development; Chonchaiya et al., (2013) study expresses that low level auditory processing is important for early language acquisition; Rescorla, Lee, Oh & Kim, (2013) study suggests development is the same regardless of language or country but age and gender play a significant role; and Marjanovic-Umek, Fekonja, Podlesek & Kranjc, (2011) offer evidence supporting the notion that parental education can be an indicative factor of toddler vocabulary. These different studies show how complicated and important language development is not only for communicative purposes but also for all other aspects of human development, while also drawing attention to potential gender differences.

Starting in the earliest stages of development, language is an essential building block. As early as 6-9 months, researchers have been able to identify the importance of auditory processing in language development and were able to single out areas of difference between genders (Chonchaiya et al., 2013). Furthering these findings, both Rescorla et al., (2013) and Henrichs et al., (2013) studied preschool aged children's language development and found that not only do girls have higher than the mean vocabulary with more developed expressive vocabulary, but that regardless of the language, age and gender play a more important role in language development and that language development plays an important role in behavioral development. These findings are important as they highlight an area of need; starting at a young age language

instruction needs to be differentiated based off individual student needs. Additionally, Marjanovic et al., (2011) study also focused on preschool aged children but explored whether parental education was indicative of language acquisition and found parental education and toddler gender had significant impact on language scores which only furthers the notion that there are a vast array of variables that can affect student language learning. While these studies pinpoint early areas of concern in language processing, they are limited by the age group they focused on. More studies conducted within a public education K-12 setting would be interesting as they could add insight into how curriculum might take these gender differences into account when teaching new language skills.

<div align="center">**Self-efficacy and Education**</div>

Rather than only focusing on self-efficacy playing a role in a single component of an individual's development, it seems prudent to consider how self-efficacy can affect education from a broader curriculum standpoint as well. There are many studies that suggest that self-efficacy in language learning and language teaching can significantly affect the quality of instruction and education in a classroom (Guo, Sawyer, Justice, & Kaderavek, 2013; Fernandez & Inserra, 2013; Wu, 2012). However, there are also many studies which focus on how increasing knowledge can increase self-efficacy and increasing self-efficacy can increase levels of task performance and learning strategy usage (Mitchum, Greenridge, Bradham-Cousor, Figilozzi, & Thompson, 2012; Wu, Lowyck, Sercu, & Elen, 2012; Wu, 2012). Self-efficacy can seemingly affect a wide variety of different components of education and can similarly be affected by these same

components. Understanding how a learning environment can bolster a student's sense of self is critical to increasing student performance and encouraging proper development.

Not only is teacher involvement necessary, but the amount of parental self-efficacy and support is also important for student success. Mack's (2012) and Moskovsky, Alrabai, Paolini, & Ratcheva's (2013) studies show that teacher guidance and motivational behaviors can increase student success and participation; additionally, Park & Halloway (2013) and Plata-Potter, Ixa, & Guzman (2012) highlight the importance of enhancing parental levels of self-efficacy in order to support engagement at home. The notion of creating a support system for students with high levels of self-efficacy highlights just how important and complex it can be to increase student levels of self-efficacy towards learning. Other studies stress the significance of bolstering language ability in regards to student success, not only in their learning, but also in their ability to control their behaviors and further that perception with noting that supportive interventions are needed equally regardless of students being language minority learners or mono-language learners (Pierce, Wechsler-Zimrig, Noam, Wolf, & Katzir, 2013; Mack, 2012). Strategic interventions alone can work for or against a student, but coupling that idea with the concept that interventions are equally needed regardless of reason is important to consider as language ability can also help or hinder a student's level of self-efficacy. All aspects of a student's learning environment, with the right planning and resources, can help a student be a more successful and well-adapted individual; however, these individual adjustments become more challenging when they must be couched within a mandated curriculum.

Several studies also emphasize the impact motivation has on student success and levels of self-efficacy and vice versa. Not only do self-related beliefs play an important role in language development, but successful learners tend to have increased levels of self-efficacy and higher levels of intrinsic motivation (Formos, Kiddle, & Csizer, 2011; Lin, Wong, McBride-Chang, 2012; Xiao, 2012). It seems that success in any area of learning, whether it is in language development, self-related beliefs, motivation, learning tasks, participation, etc., can help start a cycle of success for students and is usually found in meaningful and purposeful learning. Similarly, without reason to maintain motivation or the ability to link learning to goals, student levels of self-efficacy and motivation can wane (Formos, Kiddle, & Csizer, 2011; Xiao, 2012). Without curriculum that considers the intricacies of individual development, these cycles of student success can easily be broken. Chau, Wu, Chen, & Lughmani (2012) suggest teaching to standardized language tests tends to focus on syntax and lexicon and lacks content that students can relate to their own learning or lives. It seems without the ability to tie learning to goals or ideals, students will begin to lose motivation, causing their own cycle of success to break.

Park & Holloway (2013) and Platta-Potter, Ixa, & Guzman (2012) explore the interplay of self-efficacy, education, and curriculum by interviewing both immigrant and nationally representative parents in their studies to examine different ways of increasing parent self-efficacy and involvement. These findings are important as they suggest change can be made at home to help increase student self-efficacy and involvement through the support of parental figures and that schools have the ability to help make this change. Similarly, several studies analyze data provided from the perspective of the

classroom teacher to help determine how teachers understand and interpret the literacy environment in their classrooms and how language students are often misplaced (Fernandez & Inserra, 2013; Guo et al., 2013). Through this data, the need for teacher education in regards to how students are placed and how learning environments can affect literacy seems important. While Park & Holloway (2013), Platter-Potter, Ixa, & Guzman (2012), Fernandez & Inserra (2013), and Guo et al. (2013), all use participants other than students, their data offers insights into several of the major components that help shape the learning environment for students. Without the proper foundation at home and in the classroom, it seems it would be difficult for a student to maintain the levels of learning self-efficacy necessary to be effective, especially when learning a first or second language.

Gathering more reflective data on how teachers and students might experience language learning and self-efficacy, Moskovsky et al. (2013) and Chau et al. (2012) present quantitative data using pretest and posttest methods exploring how incorporating motivational strategies and less scripted teaching might influence student performance. This data is important as it highlights the need for teachers to increase classroom motivation as well as the need for teachers to be able to build interest in learning materials to increase student language learning self-efficacy. Without the ability to incorporate content that engages and motivates students to learn, building self-efficacy in the individual student becomes near impossible. Additionally, many studies use student data to help explore the interplay amongst self-efficacy, education, and curriculum. Focusing on ELL students, Lin, Wong, & McBride-Chang (2012), Wu (2012), and Wu et

al. (2012), offer data suggesting ELL students benefit from increased levels of motivation towards learning and utilizing prior knowledge in new learning tasks. By including motivational strategies and prior knowledge into language learning, students are able to increase levels of self-efficacy as they can relate to their learning and see the value in the new task. Without the freedom to adjust curriculum for the specific needs of individual learners, teaching literacy becomes challenging because the material lacks the components necessary to help foster students' self-efficacy towards language learning.

Self-efficacy, Gender, Age, GPA, and Curriculum

While self-efficacy is important in all aspects of learning and curriculum, there are other variables that need exploration such as: gender, age, and GPA. While there are many studies that incorporate how self-efficacy might affect learning in general, there are limited studies focusing on self-efficacy and curriculum and how gender, age, and GPA. Velayutham, Aldridge, & Fraser (2012) and Leung, Ng, & Chan (2011) both incorporate how gender plays a part in students' learning self-efficacy and found that learning effectiveness typically improves after self-efficacy improves and male students typically need more proof of task value than female students. Similarly, Rice, Lopez, Richardson, & Stinson (2013) focus on gender stereotype threats and GPA and found male students are able to maintain a higher GPA with lower levels of self-criticism while female students maintain higher GPAs with higher levels of self-criticism. Cassidy (2012) adds findings suggesting students do not view their learning environment as something they can control and while prior achievement helps build self-efficacy it must be relevant to the new learning as well. Additionally, Reid (2013) adds that higher levels of self-

efficacy leave to more interaction with faculty and staff and that higher level of interactions lead to higher GPAs suggesting, once again, that self-efficacy and achievement are intertwined. These studies are interesting as they offer data suggesting the importance of building self-efficacy through student achievement and the need to make learning applicable to individual student needs such as gender.

Cassidy (2012), Leung et al. (2011), Reid (2013), Rice et al. (2013), and Velayutham et al. (2012) all use quantitative data to explore their research. These studies offer unique insights into how gender, age, or GPA might be affected by self-efficacy. However, none of the studies combine all three variables. The data presented does suggest that self-efficacy is complex and affects learning and is also affected by many other variables. Additionally, Cassidy (2012), Leung et al. (2011) Reid (2013), and Rice et al. (2013) focus their studies on higher education students, while Velayutham et al. (2012) focus on grades 8-10 but primarily on motivational and self-regulation strategies. These studies help identify that there is a need to explore how gender, age, and GPA all potentially factor into student's levels of self-efficacy within a public education setting.

Summary and Conclusions

Self-efficacy plays an important role in individual development. When considering a student's language development, self-efficacy is a factor that cannot be overlooked. The studies presented in this literature review all reflect the need to incorporate appropriate individual learning and teaching strategies within a classroom setting to help bolster student learning and self-efficacy. However, there is a gap in the literature in regards to the possible relationships between students' perceived levels of

self-efficacy and language development within standards based test driven learning

environments and whether gender, age, and GPA can predict student levels of self-

efficacy. Since scripted curriculum and standards based testing are not a trend likely to

disappear anytime soon, researchers and educators alike need to become more familiar

with strategies that can increase student learning while also maintaining fidelity to any

scripted test prep curriculum in order to foster student learning in the most effective

manner possible. The next chapter will present the rationale for the quantitative research

design I used to explore the relationship between students' perceived levels of self-

efficacy and language development when learning within these test-driven learning

environments.

Chapter 3: Research Method

The purpose of this study was to explore the relationship between students'

perceived levels of self-efficacy and language development. Originally, a multiple

regression analysis was planned to be used to analyze the possible relationships between

students' perceived levels of self-efficacy and language development; however, due to

the way variables were entered into Survey Monkey, the test was changed to a multiway

ANOVA to better suit the study. ANOVAs allow the study of multiple effects of factors,

and they also provide information regarding their dependence or independence, which

allowed the main effects of student SHEE scores, gender, age, and GPA and the

interaction effect between student SHEE scores, gender, age, and GPA on students'

perceived levels of self-efficacy to be tested (Field, 2013). The results of this study

provide insight into the possible relationship between self-efficacy and language

development and help guide researchers into more effective ways to balance mandated

curricula with individual student needs. This chapter will include a research design and

rationale; the study's setting and target population; sampling and sampling procedures

and procedures for recruitment, participation, and data collection; details regarding

instrumentation, the data analysis plan, and threats to validity; and a summary reviewing

the research design.

Research Design and Rationale

In this quantitative study, I used a cross sectional research design. A cross

sectional design is most commonly used in survey research to explore participants'

backgrounds, experiences, and attitudes to identify possible relationships or patterns

between variables (Frankfort-Nachimas & Nachimas, 2008, p. 116). The research question was the following: What are the relationships between students' perceived levels of self-efficacy, gender, age, and GPA predict and language development when learning within a standards-based, test-driven environment? Its attendant hypothesis tested the difference of means between the IV and the DVs.

I did not using an experimental design as there was no intervention being administered to the participants; rather, the participants had all experienced the test-driven environment, and it was their past experiences and attitudes that were collected through survey data and compared to their language test scores. To help lessen the limitations of this design, a multiway ANOVA was used to test for a significant difference of means between students' perceived levels of self-efficacy (using student GSE surveys) as the DV, language development (using student SHEE ELA scores), and age, gender, and GPA as the as the IV. This design choice was dependent upon students volunteering to participate, and although the design was weaker than a traditional experimental design, I was able to identify areas of potential study for larger, more controlled, experimental studies using related interventions.

The research question for this study was the following:

RQ1: What are the relationships between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within standards-based, test-driven environment?

$H_0 1$: There is no significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within standards-based, test-driven environment.

$H_1 1$: There is no significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment.

Setting

The setting for this study was in a public school district in the western United States, which enrolled approximately 15,000 sixth-12th grade students from a combination of rural and urban environments. The district has three comprehensive high schools with approximately 2,700 ninth-12th grade students with four administrators and five counselors at each site. This district is considered a 1-1 technology district with every student receiving a personal Google Chromebook™ for the duration of his or her schooling. Funding is received through state tax and federal funding, and approximately 65% of the student population came from Spanish speaking homes, and 85% of students enrolled qualify for free and reduced lunch.

Target Population

The target population for this study was students enrolled in Grades 11 and 12 for the 2015/2016 school year. The average approximate number of 11th and 12th grade students enrolled in this district was 3,200. The students participating in the study had nearly completed their public schooling and been exposed to a variety of test-driven environments, as well as standardized tests. They had all taken the SHEE their 10th

grade year, which was one factor in determining their graduation status. They had

multiple years to experience both successes and failures in the educational setting, and it

was expected that this population would represent the experiences with similar

demographics.

Sampling and Sampling Procedures

In this study, I used a nonprobability convenience sample design I depended on

students' volunteering to participate in the survey and was exploring the possible

relationships in the particular student population. The students within the target

population were asked to participate in the study through electronic surveys. Their

participation was voluntary and made it impossible to predict how the population would

be represented. The sampling strategy was a convenience sample as the target population

fell within the perimeters of the focus of this study as all students had participated in

multiple standardized tests; been taught within test-driven classrooms; and had access to

individual Chromebook, which helped to facilitate participation in a noninvasive manner.

An *a-priori* sample size calculator was originally used to determine the

appropriate sample size for this study (Soper, 2015). The original data plan included a

multiple regression model with an anticipated effect size of 0.15, a statistical power of

0.95, four predictors, and a probability level of .05; the minimum required sample size

was 118. However, because of the way data were inputted into Survey Monkey™, the

test was changed to an ANOVA, and the actual sample size of this study was 77 and the

effect size was 0.21, with a statistical power of 0.9, four predictors, and a probability

level of .03. Because my research was based upon convenience, nonrandom sampling, I

used all completed students' submissions because the more students who submitted, the more inferential power available in the data analyses.

Procedures for Recruitment, Participation, and Data Collection

Recruitment for this study began by obtaining a letter of cooperation from the superintendent of the school district of the research sites (See Appendix A). Additionally, I asked the superintendent to sign a data use agreement granting me permission to collect student data applicable to this study (See Appendix B). Participants for this study were recruited, on a voluntary status, from the population of 11th and 12th grade students in the district through the distribution of an electronic survey through their password protected school e-mail. As I am a teacher in the school district, students were only recruited from the two comprehensive high schools where I do not work to ensure students did not feel coerced into participating. For the students under the age of 18 the following occurred: prior to participation, at the beginning of the survey, a parental consent form was provided to allow parents to indicate whether or not their child could participate (See Appendix C). Following the parental consent was a letter of assent allowing the student to indicate whether he or she was willing to participate (Appendix D). For students 18 years of age or older, there was an adult consent form (Appendix E). Students were able to complete the survey during their own free time as to not take away from any class instruction.

Data collection included students completing the 10-question GSE survey at a time of their convenience.   As approved by the institutional review board (IRB), ELA SHEE score, gender, age, and GPA were self-reported by the student. Differing from the

original data plan, student data were chosen from a multiple choice scale creating ordinal variables that would not work in a multiple regression; hence, the analysis was changed to a multiway ANOVA. Due to the design of the survey and the need to collect multiple consent forms and link them appropriately to the student, the survey was also changed from anonymous to confidential. No follow-up measures were necessary; however, students were informed that their participation was appreciated and finished when they either opted out of the survey or completed their survey.

Instrumentation

General Self-Efficacy Scale

Schwarzer and Jerusalem's (1995) GSE scale was the survey instrument used for this study. The GSE has been used for over 2 decades to assess the strength an individual feels that he or she has towards overcoming new obstacles or challenges. The GSE is free to use for noncommercial and developmental research purposes through both paper and electronic versions (See Appendix F). The GSE is a 10-item scale, and each item is ranked on a 4-point scale (1-*Not at All True*, 4-*Exactly True*) the scores for each item are then added together for a total score between 10-40.   The higher the individual's GSE score, the higher his or her generalized sense of self-efficacy.

The GSE was originally developed in 1979 in German and then adapted and translated into 26 other languages. According to Schwarzer and Jerusalem (1995), samples from 23 different nations show Cronbach's alphas ranging from .76 - .90 with the majority of scores in the high .80s. The scale is unidimensional and has been used internationally for a wide variety of applications; however; Schwarzer and Jerusalem

suggested that it is best suited to either predict an individual's ability to adapt after a life change or indicate the quality of an individual's life at any time. The weakness of this instrument is that it is a general scale and does not focus on behavioral changes.

State High School Exit Exam

The SHEE (a pseudonym is being used) is a required standardized test for the state. The test provides a score for both math and ELA, and passing is a necessary component for high school graduation. The SHEE was piloted during the 1999/2000 school year as a part of NCLB and has been used as a measure of student proficiency, district academic performance index (API), and district academic yearly progress (AYP) scores for the last 15 years (CDE, 2015). The test has been independently evaluated by Human Resources Research Organization (HumRRO) both annually and biannually to ensure fairness and content relatedness of the exam since the pilot year (CDE, 2015). A scale score is provided for both math and ELA between 275-450, and a score of 350 is needed on both sections in order to pass. The scores for ELA are also broken into three categories: passing (350), proficient (382), and advanced (405; CDE, 2015). Students also have multiple attempts to pass the SHEE before graduation, and scores were broken down by first attempt, second attempt, and so on. According to the CDE (2015), Cronbach's alpha for the ELA portion of the SHEE ranges from 0.86-0.95. For this study, I only focused on the ELA score as I was interested in language development.

<div align="center">

Data Analysis Plan

</div>

For this study, I used the Statistical Package for the Social Science (SPSS Version 22.0) to process and analyze research data (IBM, 2013). I tested the hypothesis using the

data streams, GSE students survey scores, 2013-2015 SHEE ELA student scores, gender, age, and GPA. SPSS was originally planned to be used to test for the presence of the assumptions of multiple regression, and then a step-wise multiple regression analysis was planned to be used to evaluate whether there was a significant relationship between GSE scores and SHEE ELA scores, age, gender, and GPA. Due to the manner in which the data were collected, the analysis was changed to a multiway ANOVA to determine the relationships between GSE scores and student-reported SHEE ELA scores, age, gender, and GPA.

The purpose of this study was to determine the relationships between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment. The IV, student self-efficacy, was measured by Schwarzer and Jerusalem's (1995) GSE scale, and the DVs (SHEE ELA score, age, gender, and GPA) were self-reported by the participants and considered in relation to student GSE scores.

Threats to Validity and Ethical Considerations

Threats to external validity in this study were found in the nonrandom nature and voluntary status of the sample. Because the survey was voluntary, there was no way to predict how the different subgroups of the population would be represented. To ensure accurate representation of the population, a predetermined number of surveys to each subgroup would need to be administered. Due to the nature of the target population, this was not feasible. Analysis was conducted using standard factor analysis parametrics for quantitative research and nonparametric if populations would have been too small.

Ethical Considerations

Ethical considerations for this study were found in the nature of the target population. Parental consent and child assent were required at the beginning of each survey. Instructional time was not need to administer the survey as they were sent out electronically so parents and students could complete the survey at the most convenient time. Walden IRB approval was obtained before the study began (01-27-16-0291632).

Summary

This chapter included a research design for this quantitative cross sectional study. The purpose of this study was to explore the relationship between students' perceived levels of self-efficacy and language development through a multiway ANOVA. The DV of this study was students' perceived level of self-efficacy measured by GSE scores, and the EV was student self-reported SHEE ELA scores. The predictor variables were student gender, age, and GPA. The target population for this study was 11th and 12th grade students who were enrolled in the 2015/2016 school years. Students' participation involved a voluntary electronic survey with 10 items. SHEE ELA, gender, age, and GPA data were self-reported by the student participants. SPSS was used to process and analyze data through an ANOVA. Results of the statistical analysis will be presented in Chapter 4.

Chapter 4: Results

The purpose of this quantitative study was to explore the relationship between high school students' perceived levels of self-efficacy and language development through a multiway ANOVA. Data were collected through the use of SurveyMonkey™ and analyzed through SPSS Version 22.0. Study participants completed consent forms, and entered their gender, age, GPA, and SHEE scores and responded to the 10 question GSE. The research question was stated as follows:

What are the relationships between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment?

$H_0 1$: There is no significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment.

$H_1 1$: There is a significant relationship between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment.

This chapter will include a description of the data collection process, report analytical results, and provide a summary of the results.

Data Collection

After obtaining approval from the Walden University IRB, data collection began and spanned over a 2-week period through an electronically distributed survey. The survey was distributed to all 11th and 12th grade students at two comprehensive high

schools from the same district. All students within the district had a personal password-protected Chromebook™ and personal password-protected school e-mail. The survey was sent to 2,473 individual students within the district. The demographic background of the students was a combination of rural and urban environments. All students were far enough along in their high school career to have taken the SHEE which, until the beginning of this school year (2015-2016), was a factor in determining their graduation status.

Data collection differed from the original data plan in that all data (ELA SHEE score, gender, age, and GPA) were self-reported by the student, rather than gathered from the district. Due to the design of the survey and the need to collect multiple consent forms and link them appropriately to the student, the survey was also changed from anonymous to confidential. Additionally, the original data plan was for a multiple regression model and an *a-priori* sample size calculator using a multiple regression model to determined an anticipated effect size of 0.15, a statistical power of 0.95, four predictors, and a probability level of .05; the minimum required sample size was 118 (Soper, 2015). However, the data were collected from SurveyMonkey™ and created ordinal variables that would not be conducive to a multiple regression, resulting in the analysis being changed to an ANOVA to more accurately analyze the survey data. The actual sample size of this study was 76 with the probability level changed to < .03 to guard against any false significance due to the size of the sample and a statistical power of 0.97.

In this study, I used a nonprobability convenience sample. I depended on students' volunteering to participate and explored the potential relationships that were particular to this student population. Out of the approximate 2,500 students who received the survey, 88 students took the survey, with76 completing the entire survey. This was 3% of the targeted population. Only completed surveys were used for the data analysis.

Results

Descriptive Statistics

Data collected with Survey Monkey were imported into SPSS for analysis. In the survey responses, I gathered descriptive statistics on age, gender, GPA, and ELA SHEE scores. As shown in Table 1, the demographic data on gender for this study shows that 62% of participants were female (n=48), 36% were male (n=28), and 0.01% were other (n=1). Additionally, the demographic data for this study on age showed that 92% of participants were 18< (n=71), while 0.07% were 18> (n=6). For participant's self-reported GPAs, 23% reported 4.1 or above (n=18), 36% reported 3.6– 4.0 (n=18), 23% reported 2.6 – 3.0 (n=18), 15% reported 2.5 or below, and no participants reported 3.1-3.5. Lastly, survey participants' self-reported SHEE scores showed 57% (n=44) with a score of 405-450, 35% (n=27) with a score of 382-404, .03% (n=3) with a score of 275-349, .02% (n=2) not taken, and no participants reported a score of 350-381.

Table 1

Between-Subjects Factors

		Value Label	N
Age	1	18<	70
	2	2	6
Gender	1.00	Female	48
	2.00	Male	28
NGPA	1.00	4.1 or above	18
	2.00	3.6 - 4.0	28
	4.00	2.6 - 3.0	18
	5.00	2.5 or below	12
NELA	1.00	405-450	44
	2.00	382-404	27
	4.00	275-349	3
	5.00	Not Taken	2

External Validity

According to the CDE (2015), females represented 47% of the state-wide public

school enrollees, while males represented 51%. In the district where this study took

place, the percentage of female students was 50.5% and male students was 49.5%. There

were no state or local data for the options of selecting gender identification as other. The

data on gender for this study differed from that of the state by 15% more females

participating than the state's average and 15% fewer males and within the district of the

study 11.5% more females participated and 13.5% fewer males participated. The gender

distribution of this study more closely represented the district it was administered in than

in the state. The CDE (2015) did not provide enrollment data broken down by age;

however, the enrollment statewide for 11th and 12th grade students was 29% of the sixth-

12th grade student population. Similarly, the population of this study, 11th and 12th

graders, contributed to 30% of the district's student enrollment. The population surveyed

was a convenience sample to explore the potential relationships within this particular

student population, and the external validity of this study should be limited to the

population of the district where the study was administered.

Data Analysis

A multiway ANOVA was conducted to compare the main effects of student

SHEE scores, gender, age, and GPA and the interaction effect between student SHEE

scores, gender, age, and GPA on students' perceived levels of self-efficacy. The DV,

student levels of self-efficacy, was calculated by summing the participants' responses to

ten self-efficacy questions from the GSE survey. The participants in the survey entered

the variables, ELA SHEE score, gender, age, and GPA. Students chose the most

appropriate range for ELA SHEE scores and GPAs and had the options of female, male

or other for gender and 18> or 18< for age. Survey answers were then ranked for data

analysis. For SPSS, ELA was coded as 1 = 405 – 450, 2 = 382-404, 3 = 350-381, 4 =

275-349, 5 = I have not taken the ELA SHEE, Rank 1 was set to largest value. GPA was

coded as 1 = 4.1 or above, 2 = 3.6 – 4.0, 3 = 3.1-3.5, 4 = 2.6 – 3.0, 5 = 2.5 or below;

Rank 1 was set to largest value. Age was coded as 0 = 18<, 1 = 18 >. Gender was coded as 1= male, 2 = female.

As shown in Table 2, all effects were found insignificant except the age factor was found statistically significant at the .05 significance level; however, with so few participants, this result was not accepted. As shown in Tables 2 and Appendix G, the main effect for age yielded an F ratio of $F(1, 51) = 8.1$, $p = .006$, indicating a significant difference between age groups: 18< (M = 30, SD = 3.7), >18 (M = 25.3, SD 5.9). The main effect for gender yielded an F ratio of $F(1, 51) = 1.0$, $p = .316$ indicating the main effect for gender was not significant, female (M= 29.3, SD = 3.7), male (M = 30.3, SD = 4.6). The main effect for GPA yielded an F ratio of $F(3, 51) = .156$, $p = .926$, 4.1 or above indicating the main effect for GPA was not significant (M = 30.9, SD = 2.7), 3.6 – 4.0 (M = 29.8, SD = 4.0), 2.6 – 3.0 (M = 28.1, SD = 5.2) and 2.5 or below (M = 30, SD = 3.8). ELA SHEE scores main effect yielded an F ratio of $F(3, 51) = .409$, $p = .747$ indicating the main effect for ELA SHEE scores were not significant, 405-450 (M = 30.4, SD = 3.6), 382-404 (M = 28.6, SD = 4.7), 275-349 (M= 28.6, SD = 4), and not aken (M = 29.6, SD = 4).

Table 2

Tests of Between-Subjects Effects Dependent Variable: GSE Score

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	538.973[a]	24	22.457	1.634	.071	.435
Intercept	12524.019	1	12524.019	911.076	.000	.947
Age	112.139	1	112.139	8.158	.006	.138
Gender	14.114	1	14.114	1.027	.316	.020
NGPA	6.414	3	2.138	.156	.926	.009
NELA	16.856	3	5.619	.409	.747	.023
AGE * Gender	.166	1	.166	.012	.913	.000
AGE * NGPA	7.974	1	7.974	.580	.450	.011
Gender * NGPA	46.831	3	15.610	1.136	.344	.063
Gender * NELA	18.906	2	9.453	.688	.507	.026
NGPA * NELA	65.294	4	16.323	1.187	.328	.085
Gender * NGPA *	9.869	2	4.934	.359	.700	.014
Error	701.067	51	13.746			
Total	68267.000	76				
Corrected Total	1240.039	75				

Note. R Squared = .435 (Adjusted R Squared = .169)

Summary

The purpose of this study was to consider the relationships between students'

perceived levels of self-efficacy, gender, age, and GPA and language development when

learning within a standards-based, test-driven environment. Self-efficacy levels were

measured with the GSE and language development was measured through the state

standardized ELA portion of the SHEE. Predictor variables gender, age, and GPA were

self-reported by participants. Of the possible 2,500 participants, 88 were surveyed;

however, 12 were excluded from the study due to incomplete surveys. The population

sample consisted of 76 completed survey responses. Data were collected through

SurveyMonkey and analyzed through SPSS Version 22.0.

Originally, the study was designed to use a multiple linear regression analysis to

predict the possible relationships between students' perceived levels of self-efficacy,

gender, age, and GPA and language development. Due to the way the data were

collected through SurveyMonkey™ – creating ordinal variables, a multiway factorial

ANOVA was used. I found the ANOVA model significant for predicting GSE scores by

age with $p = .006$ indicating a significant difference between age groups. All other

effects found no significance: gender ($p = .316$), GPA ($p = .926$), and ELA SHEE ($p = $

$.737$). Based on the results of the ANOVA, the null hypothesis stating that there is no

significant predictive relationship between students' perceived levels of self-efficacy,

gender, age, and GPA and language development when learning within a standards-

based, test-driven environment was accepted as there was not a statistically significant

relationship found between students' perceived levels of self-efficacy, gender, age, and

GPA.

Chapter 5: Discussions, Conclusions, and Recommendations

The purpose of this quantitative study was to explore the possible differences between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment. The theoretical framework for this study was shaped by Vygotsky's (1986) theories on thought and language and Bandura's (1997) theories on self-efficacy. These two theories allow for literacy development to be considered in conjunction with the progression of individual thought and language development and levels of self-efficacy. The GSE was used to measure student-perceived levels of self-efficacy and ELA SHEE scores were used to measure student language development. Although I found a statistically significant relationship between GSE scores and age, gender, ELA SHEE scores, and GPAs did not show statistically significant relationships with GSE scores. In this chapter, I will summarize and interpret the key findings of this study and discuss the limitations of the study. Additionally, I will present recommendations for further research on self-efficacy and language development as well as potential implications for social change.

Interpretation of the Findings

The purpose of this study was to explore students' perceived levels of self-efficacy and language development, gender, age, and GPA when student learning was in a standards-based, test-driven environment. Vygotsky and Bandura suggested that curriculum created to prepare students for standardized tests often fails to meet individual needs, such as increased levels self-efficacy, due to the linear nature of scripted learning

(Barton & Sakwa, 2012; Parks & Bridges-Rhoads, 2012; Spencer et al., 2012). The goal was to explore student self-efficacy and language development within the same framework but in a more specific manner by including an environment and variables. The results of the multiway ANOVA analysis suggested a significant relationship between student self-efficacy scores and age; however, with few participants, the anticipated the results were not accepted. There was no statistical significance found between gender, GPA, and ELA SHEE scores. The null hypothesis suggesting no relationship between these variables was accepted.

The results reported are not as consistent with findings from literature such as Dalton (2011), Dammeyer (2012) ,and Shanahan and Shea (2012). These scholars suggested that language development is a component of all learning and interaction. I found that language development as measured by the ELA SHEE did not have a statistically significant relationship with student levels of self-efficacy. Similarly, Bandura's (1997) theories on self-efficacy did not entirely match the reported results as Bandura suggested that the more successful a student feels regarding his or her learning, the higher his or her levels of self-efficacy will be.

I found that students within the 18> age group had lower GSE scores than that of the <18 age group. Bandura (1997) theories suggested that positive or negative experiences can lead to increased or decreased levels of self-efficacy, and although it is not known whether the students with a higher age range took the ELA SHEE multiple times or struggled in school, it is an area to consider for further research as the age variable had a significant result. O verall, the variable of age had less current research

than that of language development, gender, or GPA; however, a more comprehensive look at age and language development in regards to self-efficacy is worth considering.

Park and Holloway (2013) and Platta-Potter et al. (2012) explored similar variables of self-efficacy, education, and curriculum; however, their populations consisted of immigrant parents; but, they suggested that building self-efficacy at home could increase language development at school. Unlike this study, many scholars use participants other than students, such as parents or teachers, and they supported the notion that self-efficacy and language development are integral components of a student's learning (Fernandez & Inserra, 2013; Gua et. al., 2013; Park & Holloway, 2013; Platta-Potter et al., 2012). Many studies, both quantitative and qualitative, offered insights into how gender, age, GPA, or language development might be affected by self-efficacy; however, none of these studies combined all four variables. I found that student levels of self-efficacy could be significantly affected by age when student learning takes place within a standards-based, test-driven environment that suggests a need for further exploration of why age could affect GSE scores within this type of environment. Although the other relationships did not show a statistically significant result, scholars should consider how language development, gender, and GPA levels are different at different ages and how this might affect GSE scores.

Limitations of the Study

As stated in Chapter 1, this study was limited to two public high schools; student participation was voluntary and limited to 11th and 12th grade students. The cross sectional design of this study served this study best as it allowed for the participants'

attitudes to be explored through the analysis of student survey data (Frankfort-Nachimas-Nachimas, 2008). Limiting the population to two of the three high schools in the district was necessary to this study to ensure that participants did not feel coerced into participation due to my title within the district; however, it did limit the amount of participants who volunteered. The aim for this study was to reach 118 participants, and although only 76 participants completed the survey in its entirety, the analysis protocols of the study were robust enough to account for assumptions and preferences (Kirk, 2013). Using an a-priori calculator, the desired sample size of 118 allowed for an anticipated effect size of 0.15, a statistical power of 0.95, with four predictors, and a probability level of .05. The actual sample size of this study was 76, which created the effect size was 0.21, with a statistical power of 0.9, four predictors, and a probability level of .03 (Soper, 2015). The generalizability of the study's findings is limited to the district from which the sample came, as it was a nonprobability convenience sample and could not ensure how the subsets of the population would be represented. While the population within the district was closely matched, the data from the state differed by nearly 15%. Additionally, the survey data collected relied on self-reported data from participants and were not compared to district data. Variances should be considered.

Recommendations

The strengths and limitations of this study provide insight into possibilities of future research in this area. I found a statistically significant result with the age variable and GSE scores showing younger students with a higher GSE score than those over the age of 18. There was no statistically significant relationship found with the other

variables gender, GPA, and ELA SHEE. The study was limited to a specific population

and to a nonprobability convenience sample; if more students were surveyed and the

sample better matched, the population perhaps the results would differ. Past scholars

typically focused on teacher or parent observations, or one of the variables explored

within this study. I found value in exploring self-efficacy scores and language

development in a larger, more predictable study. More specifically, I found that there

was value in furthering research in the area of age, GSE, and language development, an

area with little current research.

Additionally, researchers attempting to further this line of research might benefit

from surveying a broader spectrum of student participants from a larger participant pool

or comparing more than one population. The response rate for this survey was lower than

anticipated; perhaps the method of data collection should be considered. Electronic

surveys could be sent out more than once, or if time allowed, the researcher could

introduce the survey. Similarly, pulling data from the district rather than having students

self-report data might prevent inconsistencies within the data itself as well as using data

conducive to a multiple regression as this study originally intended.

Implications

Self-efficacy plays a role in individual development. It is important to consider

the relationship between an individual student's age and perceived levels of self-efficacy.

Test prep type curriculum is a current tread in education that seems to be morphing to

attempt to properly equip teachers to better prepare students for mandated state tests;

however, the individual student levels of self-efficacy are an aspect of education that

need to be considered. Within the population studied, student age was a significant predictor of student levels of self-efficacy; more specifically, the younger group of students showed higher levels of self-efficacy in regards to language development. By including ways to bolster student levels of self-efficacy at all age levels, educators could assume they would be helping students to achieve more and gain more from their education.

Schools and school districts as a whole should consider these aspects of student education when adopting new curricula. There are aspects of test preparation that might be working as intended at this site. However, the student populations and expectations are constantly changing. An active stance on meeting these requirements is necessary; school sites should be considering student data, interventions, and populations. Similarly, educators need to consider the whole of the students' education rather than just the content areas being tested. A more balanced approach to education could help schools and schools districts reach mandated student achievement goals. Intervention programs typically happen after a student fails and increase as the student gets older and continues to fail. This is an area of test prep curriculum that should be considered. By equipping students with more robust self-efficacy and language skills, educators are preparing a work force and a community that can help foster the same kinds of growth throughout their lives and interactions. The results of this study will be shared within the district the study took place. By disseminating the results through the school district, other educators throughout the district will be able to consider the implications brought forth.

Social Change

The implication for social change in this study is found in the consideration of building student self-efficacy whenever possible while maintaining fidelity to state mandated goals. By doing so, educators are better serving their students, while still attempting to reach state expectations and while still maintaining well rounded content teachings and rigor. Additionally, there are aspects of current curriculum trends that are helping students reach proficiency while also building levels of self-efficacy. Identifying strategies that help students and schools effectively reach their goals can help create a tradition within a school site and community that encourages and fosters achievement. Ideally, finding a balance between helping students achieve academically while also building personal levels of self-efficacy will help students graduate and become active and versatile individuals in the community. Individuals who have achieved proficiency and success in school while also maintaining high levels of self-efficacy are more likely to embody the types of characteristics of leaders who are successful when faced with new obstacles and challenges (Bandura, 1994). It is possible for students and schools to work together in a productive and healthy manner.

Conclusion

This study was based on Vygotsky's (1986) theories on thought and language development and Bandura's (1997) theories on self-efficacy. The aim of this study was to explore the potential relationships between students' perceived levels of self-efficacy, gender, age, and GPA and language development when learning within a standards-based, test-driven environment. I found that student age was a significant predictor of

student levels of self-efficacy, while student gender, ELA SHEE scores, and GPA were not. Study limitations presented may provide considerations for further studies.

The results of this study create a foundation from which future researchers can use to explore the potential relationships between student levels of self-efficacy and language development by considering the role that student age plays in this part of individual development. The impact of mandated curriculum and state testing on individual levels of self-efficacy and language development needs to be recognized for future educators and curriculum development. The potential benefits of increasing student levels of self-efficacy within the public school sector could benefit not only the student themselves but also the organization as a whole.

References

Adalier, A. (2012). Turkish and English language teacher candidates' perceived computer

    self-efficacy and attitudes toward computer. *Turkish Online Journal of*

    Educational Technology - TOJET, 11(1), 192–201. Retrieved from

    http://www.tojet.net/

Ainsworth, M. T., Ortlieb, E., Cheek, E. H., Jr., Pate, R. S., & Fetters, C. (2012). First-

    Grade teachers' perception and implementation of a semi-scripted reading

    curriculum. *Language and Education, 26*(1), 77–90.

    http://dx.doi.org/10.1080/09500782.2011.618540

Bandura, A. (1997). *Self-efficacy: the exercise of control*. City, State: Worth Publishers.

Banegas, D. L. (2011). Teachers as "reform-doers": Developing a participatory

    curriculum to teach English as a foreign language. *Educational Action Research,*

    19(4), 417–432. http://dx.doi.org/10.1080/09650792.2011.625654

Barton, A., & Sakwa, L. N. (2012). The representation of gender in English textbooks in

    Uganda. *Pedagogy, Culture and Society, 20*(2), 173–190.

    http://dx.doi.org/10.1080/14681366.2012.669394

Bostock, L., & Boon, H. (2012). Pre-service teachers' literacy self-efficacy and literacy

    competence. *Australian and International Journal of Rural Education, 22*(1), 19–

    37. Retrieved from https://www.spera.asn.au/research/journals/

Bozdogan, D., & Özen, R. (2014). Use of ICT technologies and factors affecting pre-

    service ELT teachers' perceived ICT self-efficacy. *Turkish Online Journal of*

Educational Technology - TOJET, 13(2), 186–196. Retrieved from

http://www.tojet.net/

California High School Exit Examination (CAHSEE) -Testing (CA Dept of Education).

(n.d.). Retrieved July 13, 2015, from http://www.cde.ca.gov/ta/tg/hs/

Carreira, M., & Kagan, O. (2011). The results of the national heritage language survey:

Implications for teaching, curriculum design, and professional development.

Foreign Language Annals, 44(1), 40–64. http://dx.doi.org/10.1111/j.1944-
9720.2010.01118.x

Cassidy, S. (2012). Exploring individual differences as determining factors in student

academic achievement in higher education. *Studies in Higher Education, 37*(7),

793–810. http://dx.doi.org/10.1080/03075079.2010.545948

Chau, J., Wu, W., Chen, J., & Lughmani, S. (2012). ESL readers' comprehension

performance: The Chinese secondary context. *ELT Journal, 66*(3), 304–317.

http://dx.doi.org/10.1093/elt/ccr088

Cha, Y.-K., & Ham, S.-H. (2011). Educating supranational citizens: The incorporation of

English language education into curriculum policies. *American Journal of

Education, 117*(2), 183–209. http://dx.doi.org/10.1086/657887

Chonchaiya, W., Tardif, T., Mai, X., Xu, L., Li, M., Kaciroti, N., … Lozoff, B. (2013).

Developmental trends in auditory processing can provide early predictions of

language acquisition in young infants. *Developmental Science, 16*(2), 159–172.

http://dx.doi.org/10.1111/desc.12012 I stopped reviewing here. Please go through

the rest of your references and look for the patterns I pointed out to you.

Cianca, S. (2012). Cross-age reading buddies and cultural-sensitive literature: student-

centered English language instruction in an Ethiopian budget school. Journal of

Research in Childhood Education, 26(4), 392–417.

http://dx.doi.org/10.1080/02568543.2012.686472

Corkett, J., Hatt, B., & Benevides, T. (2011). Student and teacher self-efficacy and the

connection to reading and writing. Canadian Journal of Education, 34(1), 65–98.

Retrieved from http://www.csse-scee.ca/CJE/

Costello, D. (2012). Why am I teaching this? Investigating the tension between mandated

curriculum and teacher autonomy. Canadian Journal of Action Research, 13(2),

51–59. Retrieved from http://journals.nipissingu.ca/index.php/cjar

Craig, C. J. (2012). "Butterfly under a Pin": An emergent teacher image amid mandated

curriculum reform. Journal of Educational Research, 105(2), 90–101.

http://dx.doi.org/10.1080/00220671.2010.519411

Dalton, C. J. (2011). Social-emotional challenges experienced by students who function

with mild and moderate hearing loss in educational settings. Exceptionality

Education International, 21(1), 28–45. Retrieved from http://ir.lib.uwo.ca/eei/

Dalton, E. M., & Brand, S. T. (2012). The assessment of young children through the lens

of universal design for learning (UDL). Forum on Public Policy Online, 2012(1).

Retrieved from http://forumonpublicpolicy.com/

Dammeyer, J. (2012). A longitudinal study of pragmatic language development in three

children with cochlear implants. Deafness and Education International, 14(4),

217–232. http://dx.doi.org/10.1179/1464315412Z.00000000024

De Araujo, Z., Jacobson, E., Singletary, L., Wilson, P., Lowe, L., & Marshall, A. M. (2013). Teachers' conceptions of integrated mathematics curricula. School Science and Mathematics, 113(6), 285–296. http://dx.doi.org/10.1111/ssm.12028

Dye, C. J., Williams, J. E., Kemper, K. A., McGuire, F. A., & Aybar-Damali, B. (2012). Impacting mediators of change for physical activity among elderly food stamp recipients. Educational Gerontology, 38(11), 788–798. http://dx.doi.org/10.1080/03601277.2011.645444

Ebanks, M. E., Toldson, I. A., Richards, S., & Lemmons, B. P. (2012). Project 2011 and the preparation of black and Latino students for admission to specialized high schools in New York City. Journal of Negro Education, 81(3), 241–251. http://dx.doi.org/10.7709/jnegroeducation.81.3.0241

Field, A. P. (2013). Discovering statistics using IBM SPSS statistics: And sex and drugs and rock 'n' roll.

Fernandez, N., & Inserra, A. (2013). Disproportionate classification of ESL students in U.S. special education. TESL-EJ, 17(2). Retrieved from http://www.tesl-ej.org/wordpress/

Free a-priori sample size calculator for multiple regression. (n.d.). Retrieved July 13, 2015, from http://danielsoper.com/statcalc3/calc.aspx?id=1

Galyon, C. E., Blondin, C. A., Yaw, J. S., Nalls, M. L., & Williams, R. L. (2012). The relationship of academic self-efficacy to class participation and exam performance. Social Psychology of Education: An International Journal, 15(2), 233–249. http://dx.doi.org/10.1007/s11218-011-9175-x

Garvis, S., & Pendergast, D. (2011). An investigation of early childhood teacher self-efficacy beliefs in the teaching of arts education. International Journal of Education & the Arts, 12(9). Retrieved from http://www.ijea.org/

Guo, Y., Sawyer, B. E., Justice, L. M., & Kaderavek, J. N. (2013). Quality of the literacy environment in inclusive early childhood special education classrooms. Journal of Early Intervention, 35(1), 40–60. http://dx.doi.org/10.1177/1053815113500343

Henrichs, J., Rescorla, L., Donkersloot, C., Schenk, J. J., Raat, H., Jaddoe, V. W. V., … Tiemeier, H. (2013). Early vocabulary delay and behavioral/emotional problems in early childhood: The generation r study. Journal of Speech, Language, and Hearing Research, 56(2), 553–566. http://dx.doi.org/10.1044/1092-4388(2012/11-0169)

Hiver, P. (2013). The interplay of possible language teacher selves in professional development choices. Language Teaching Research, 17(2), 210–227. http://dx.doi.org/10.1177/1362168813475944

Hough, S. D., & Kaczmarek, L. (2011). Language and reading outcomes in young children adopted from eastern European orphanages. Journal of Early Intervention, 33(1), 51–74. http://dx.doi.org/10.1177/1053815111401377

IBM Corp. Released 2013. IBM SPSS statistics for windows, Version 22.0. Armonk, NY: IBM Corp.

Independent Evaluation - California high school exit examination (CAHSEE) (CA Dept of Education). (n.d.). Retrieved July 13, 2015, from http://www.cde.ca.gov/ta/tg/hs/evaluations.asp

Johnson, M. A., & Chang, D. (2012). Balancing act: Addressing culture and gender in

    ESL classrooms. Journal of Adult Education, 41(1), 19–26. Retrieved from

    http://aeq.sagepub.com/

Joo, Y. J., Seo, H., Joung, S., & Lee, Y. K. (2012). The effects of academic self-efficacy,

    learning strategies, and perceived instructional strategies on high and low

    achievers' in the middle school Korean language. KEDI Journal of Educational

    Policy, 9(2), n/a. Retrieved from http://eng.kedi.re.kr/khome/eng/kjep/pubList.do

Jungert, T., & Andersson, U. (2013). Self-efficacy beliefs in mathematics, native

    language literacy and foreign language amongst boys and girls with and without

    mathematic difficulties. Scandinavian Journal of Educational Research, 57(1), 1–

    15. http://dx.doi.org/10.1080/00313831.2011.621140

Karimi, M. N. (2011). The effects of professional development initiatives on EFL

    teachers' degree of self efficacy. Australian Journal of Teacher Education, 36(6),

    50–62. Retrieved from http://ro.ecu.edu.au/ajte/

Khachikian, C. S., Guillaume, D. W., & Pham, T. K. (2011). Changes in student effort

    and grade expectation in the course of a term. European Journal of Engineering

    Education, 36(6), 595–605. http://dx.doi.org/10.1080/03043797.2011.637189

Kirmizi, Ö., & Kirmizi, G. D. (2015). An investigation of L2 learners' writing self-

    efficacy, writing anxiety and its causes at higher education in Turkey.

    International Journal Of Higher Education, 4(2), 57-66.

    http://dx.doi.org/10.5430/ijhe.v4n2p57

Kormos, J., Kiddle, T., & Csizer, K. (2011). Systems of goals, attitudes, and self-related beliefs in second-language-learning motivation. Applied Linguistics, 32(5), 495–516. http://dx.doi.org/10.1093/applin/amr019

Letts, C., Edwards, S., Sinka, I., Schaefer, B., & Gibbons, W. (2013). Socio-economic status and language acquisition: children's performance on the new Reynell developmental language scales. International Journal of Language & Communication Disorders, 48(2), 131–143. http://dx.doi.org/10.1111/1460-6984.12004

Lerner, R. M., & Overton, W. F. (Eds.). (2010). The handbook of life-span development: Volume 1: Cognition, biology and methods. New York, NY: Wiley. http://dx.doi.org/10.1002/9780470880166

Leung, C.-H., Ng, C. W. R., & Chan, P. O. E. (2011). Can co-curricular activities enhance the learning effectiveness of students?: An application to the sub-degree students in Hong Kong. International Journal of Teaching and Learning in Higher Education, 23(3), 329–341. Retrieved from http://www.isetl.org/ijtlhe/

Li, D., & Edwards, V. (2013). The impact of overseas training on curriculum innovation and change in English language education in western China. Language Teaching Research, 17(4), 390–408. http://dx.doi.org/10.1177/1362168813494124

Lin, D., Wong, K. K., & McBride-Chang, C. (2012). Reading motivation and reading comprehension in Chinese and English among bilingual students. Reading and Writing: An Interdisciplinary Journal, 25(3), 717–737. http://dx.doi.org/10.1007/s11145-011-9297-8

Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The general self-efficacy scale: multicultural validation studies. Journal of Psychology, 139(5), 439–457. http://dx.doi.org/10.3200/JRLP.139.5.439-457

Ma, A. (2012). A study of the shaping of the "emotion and attitude" domain in the new English language curriculum of China through an EFL textbook. Pedagogy, Culture and Society, 20(2), 231–250. http://dx.doi.org/10.1080/14681366.2012.688764

Mack, L. (2012). Does every student have a voice? Critical action research on equitable classroom participation practices. Language teaching research, 16(3), 417–434. http://dx.doi.org/10.1177/1362168812436922

Mancilla-Martinez, J., & Lesaux, N. K. (2011). The gap between Spanish speakers' word reading and word knowledge: a longitudinal study. Child Development, 82(5), 1544–1560. http://dx.doi.org/10.1111/j.1467-8624.2011.01633.x

Marjanovic-Umek, L., Fekonja, U., Podlesek, A., & Kranjc, S. (2011). Assessing toddler language competence: agreement of parents' and preschool teachers' assessments. European Early Childhood Education Research Journal, 19(1), 21–43. http://dx.doi.org/10.1080/1350293X.2011.548957

Martinez, C. T., Kock, N., & Cass, J. (2011). Pain and pleasure in short essay writing: factors predicting university students' writing anxiety and writing self-efficacy. Journal of Adolescent & Adult Literacy, 54(5), 351–360. http://dx.doi.org/10.1598/JAAL.54.5.5

Matsuda, A., & Friedrich, P. (2011). English as an international language: a curriculum

blueprint. World Englishes, 30(3), 332–344.

http://dx.doi.org/10.1111/j.1467-971X.2011.01717.x

Mills, N. (2009). A guide du Routard simulation: increasing self-efficacy in the standards

through project-based learning. Foreign Language Annals, 42(4), 607–639.

http://dx.doi.org/10.1111/j.1944-9720.2009.01046.x

Mitcham, M., Greenidge, W., Bradham-Cousar, M., Figliozzi, J., & Thompson, M. A.

(2012). Increasing career self-efficacy through group work with culturally and

linguistically diverse students. Journal of School Counseling, 10(22). Retrieved

from http://jsc.montana.edu/

Mora, R. (2011). "School is so boring": high-stakes testing and boredom at an urban

middle school. Penn GSE Perspectives on Urban Education, 9(1). Retrieved from

http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?di

rect=true&db=eric&AN=EJ957120&scope=site

Moskovsky, C., Alrabai, F., Paolini, S., & Ratcheva, S. (2013). The effects of teachers'

motivational strategies on learners' motivation: a controlled investigation of

second language acquisition. Language Learning, 63(1), 34–62.

http://dx.doi.org/10.1111/j.1467-9922.2012.00717.x

Nguyen, M. H. (2013). The curriculum for English language teacher education in

Australian and Vietnamese universities. Australian Journal of Teacher Education,

38(11). http://dx.doi.org/10.14221/ajte.2013v38n11.6

Nord, C., Roey, S., Perkins, R., Lyons, M., Lemanski, N., Brown, J., Westat, I. (2011).

The nation's report card[TM]: america's high school graduates. Results of the

2009 NAEP High School Transcript Study. NCES 2011-462. National Center for

Education Statistics. Retrieved from https://nces.ed.gov/

Okebukola, F. (2012). The views of Nigerian teachers in public and private primary

schools on the teaching of early literacy in English. Literacy, 46(2), 94–100.

http://dx.doi.org/10.1111/j.1741-4369.2011.00605.x

Ong, Y. M., Williams, J. S., & Lamprianou, I. (2011). Exploration of the validity of

gender differences in mathematics assessment using differential bundle

functioning. International Journal of Testing, 11(3), 271–293.

http://dx.doi.org/10.1080/15305058.2011.555574

Paradis, J., Schneider, P., & Duncan, T. S. (2013). Discriminating children with language

impairment among English-language learners from diverse first-language

backgrounds. Journal of Speech, Language, and Hearing Research, 56(3), 971–

981. http://dx.doi.org/10.1044/1092-4388(2012/12-0050)

Parks, A. N., & Bridges-Rhoads, S. (2012). Overly scripted: exploring the impact of a

scripted literacy curriculum on a preschool teacher's instructional practices in

mathematics. Journal of Research in Childhood Education, 26(3), 308–324.

http://dx.doi.org/10.1080/02568543.2012.684422

Park, S., & Holloway, S. D. (2013). No parent left behind: predicting parental

involvement in adolescents' education within a sociodemographically diverse

population. Journal of Educational Research, 106(2), 105–119.

http://dx.doi.org/10.1080/00220671.2012.667012

Peiser, G., & Jones, M. (2012). Rhetoric or reality: intercultural understanding in the

English key stage 3 modern foreign languages curriculum. Curriculum Journal,

23(2), 173–187. http://dx.doi.org/10.1080/09585176.2012.678499

Pierce, M. E., Wechsler-Zimring, A., Noam, G., Wolf, M., & Katzir, T. (2013).

Behavioral problems and reading difficulties among language minority and

monolingual urban elementary school students. Reading Psychology, 34(2), 182–

205. http://dx.doi.org/10.1080/02702711.2011.626108

Plata-Potter, S. I., & de Guzman, M. R. T. (2012). Mexican immigrant families crossing

the education border: a phenomenological study. Journal of Latinos and

Education, 11(2), 94–106. http://dx.doi.org/10.1080/15348431.2012.659563

Reid, K. W. (2013). Understanding the relationships among racial identity, self-efficacy,

institutional integration and academic achievement of black males attending

research universities. Journal of Negro Education, 82(1), 75–93.

http://dx.doi.org/10.7709/jnegroeducation.82.1.0075

Rescorla, L., Lee, Y. M. C., Oh, K. J., & Kim, Y. A. (2013). Lexical development in

Korean: vocabulary size, lexical composition, and late talking. Journal of Speech,

Language, and Hearing Research, 56(2), 735–747.

http://dx.doi.org/10.1044/1092-4388(2012/11-0329)

Rice, K. G., Lopez, F. G., Richardson, C. M. E., & Stinson, J. M. (2013). Perfectionism

moderates stereotype threat effects on STEM majors' academic performance.

Journal of Counseling Psychology, 60(2), 287–293.

http://dx.doi.org/10.1037/a0032052

Sani, A. M., & Zain, Z. (2011). Relating adolescents' second language reading attitudes, self-efficacy for reading, and reading ability in a non-supportive ESL setting. Reading Matrix: An International Online Journal, 11(3), 243–254. Retrieved from http://www.readingmatrix.com/

Schaffer, S. P., Chen, X., Zhu, X., & Oakes, W. C. (2012). Self-efficacy for cross-disciplinary learning in project-based teams. Journal of Engineering Education, 101(1), 82–94. http://dx.doi.org/10.1002/j.2168-9830.2012.tb00042.x

Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35- 37). Windsor, England: NFER-NELSON. (n.d.).

Shanahan, T., & Shea, L. M. (2012). Incorporating English language teaching through Science for K-2 teachers. Journal of Science Teacher Education, 23(4), 407–428. http://dx.doi.org/10.1007/s10972-012-9276-1

Singh, T. K. R., & Rajalingam, S. K. (2012). The relationship of writing apprehension level and self-efficacy beliefs on writing proficiency level among pre-university students. English Language Teaching, 5(7), 42–52. Retrieved from http://www.ccsenet.org/journal/index.php/elt

Solheim, O. J. (2011). The impact of reading self-efficacy and task value on reading

    comprehension scores in different item formats. Reading Psychology, 32(1), 1–

    27. http://dx.doi.org/10.1080/02702710903256601

Soper, D.S. (2015). A-priori sample size calculator for multiple regression [Software].

    Available from http://www.danielsoper.com/statcalc

Spencer, S., Clegg, J., & Stackhouse, J. (2012). Language and disadvantage: a

    comparison of the language abilities of adolescents from two different

    socioeconomic areas. International Journal of Language & Communication

    Disorders, 47(3), 274–284. http://dx.doi.org/10.1111/j.1460-6984.2011.00104.x

Syrnyk, C., & Meints, K. (2012). Fishy fishes: the typicality of object stimuli used to

    assess children's language in the Reynell development language scales--III.

    International Journal of Language & Communication Disorders, 47(4), 437–450.

    http://dx.doi.org/10.1111/j.1460-6984.2012.00156.x

Téllez, K., & Manthey, G. (2015). Teachers' perceptions of effective school-wide

    programs and strategies for English language learners. Learning Environments

    Research, 18(1), 111-127. http://dx.doi.org/10.1007/s10984-015-9173-6

Topkaya, E. Z. (2010). Pre-service English language teachers' perceptions of computer

    self-efficacy and general self-efficacy. Turkish Online Journal of Educational

    Technology - TOJET, 9(1), 143–156. Retrieved from http://www.tojet.net/

Topkaya, E. Z., & Yavu, A. (2011). Democratic values and teacher self-efficacy

    perceptions: a case of pre-service English language teachers in Turkey. Australian

Journal of Teacher Education, 36(8), 32–49. Retrieved from

http://ro.ecu.edu.au/ajte/

Velayutham, S., Aldridge, J. M., & Fraser, B. (2012). Gender differences in student

motivation and self-regulation in Science learning: a multi-group structural

equation modeling analysis. International Journal of Science and Mathematics

Education, 10(6), 1347–1368. http://dx.doi.org/10.1007/s10763-012-9339-y

Vygotsky, L. (1986). Thought and language - revised edition. The MIT Press.

Wang, T., & Rajprasit, K. (2015). Identifying affirmative beliefs about English language

learning: self-perceptions of Thai learners with different language proficiency.

English Language Teaching, 8(4), 1-13. http://dx.doi.org/10.5539/elt.v8n4p1

Wang, N., Wilhite, S. C., Wyatt, J., Young, T., Bloemker, G., & Wilhite, E. (2012).

Impact of a college freshman social and emotional learning curriculum on student

learning outcomes: an exploratory study. Journal of University Teaching and

Learning Practice, 9(2). Retrieved from http://ro.uow.edu.au/jutlp/

Wehde-Roddiger, C., Trevino, Rolando, Anderson, P., Arrambide, T., O'Conor, J., &

Onwuegbuzie, A. J. (2012). The influence of advanced placement enrollment on

high school GPA and class rank: implications for school administrators.

International Journal of Educational Leadership Preparation, 7(3). Retrieved from

http://www.ncpeapublications.org/index.php

Wolf, J. P. (2013). Exploring and contrasting EFL learners' perceptions of textbook-

assigned and self-selected discussion topics. Language Teaching Research, 17(1),

49–66. http://dx.doi.org/10.1177/1362168812457535

Wu, M. M. (2012). Beliefs and out-of-class language learning of Chinese-speaking ESL
learners in Hong Kong. New Horizons in Education, 60(1), 35–52. Retrieved
from http://www.tojned.net/

Wu, X., Lowyck, J., Sercu, L., & Elen, J. (2012). Self-efficacy, task complexity and task
performance: exploring interactions in two versions of vocabulary learning tasks.
Learning Environments Research, 15(1), 17–35.
http://dx.doi.org/10.1007/s10984-012-9098-2

Wu, X., Lowyck, J., Sercu, L., & Elen, J. (2013). Task complexity, student perceptions of
vocabulary learning in EFL, and task performance. British Journal of Educational
Psychology, 83(1), 160–181. http://dx.doi.org/10.1111/j.2044-8279.2011.02061.x

Xiao, J. (2012). Successful and unsuccessful distance language learners: an "affective"
perspective. Open Learning, 27(2), 121–136.
http://dx.doi.org/10.1080/02680513.2012.678611

Xiao, J. (2014). Learner agency in language learning: the story of a distance learner of
EFL in China. Distance Education, 35(1), 4–17.
http://dx.doi.org/10.1080/01587919.2014.891429

Yang, S. (2012). Exploring college students' attitudes and self-efficacy of mobile
learning. Turkish Online Journal of Educational Technology - TOJET, 11(4),
148–154. Retrieved from http://www.tojet.net/

Yang, P., & Wang, A. (2015). Investigation the relationship among language learning
strategies, English self-efficacy, and explicit strategy instructions. Taiwan Journal
Of TESOL, 12(1), 35-62. Retrieved from http://tjtesol.nccu.edu.tw/

Zhang, Y., & Guo, H. (2012). A study of English writing and domain-specific motivation

    and self-efficacy of Chinese EFL learners. Journal of Pan-Pacific Association of

    Applied Linguistics, 16(2), 101–121. Retrieved from

    http://paal.kr/journals/journals.html

Appendix A: Letter of Cooperation

July 7, 2015

Dear Alisa Wargo,

Based on my review of your research proposal, I give permission for you to conduct the study entitled The Relationship of Students' Perceived Levels of Self-Efficacy and Language Development within the High School District. As part of this study, I authorize you to electronically administer the General Self-efficacy Survey to 11th and 12th students through student email, access 2013-2015 SHEE results, and collect student demographic information such as age, gender and GPA. All data will be confidential; all students will be randomly assigned a number to ensure the protection of student identities. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include allowing access to the student data listed above. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,

Appendix B: Parent Consent Form

Your child is invited to take part in a research study of how the way students feel about their ability to respond to new and challenging situations might be related to their language skills. Your contact information was obtained through High School District. The researcher is inviting 11th and 12th grade students at High School 1 and High School 2to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to allow your child to take part.

This study is being conducted by a researcher named Alisa Wargo, who is a doctoral student at Walden University. You may already know this researcher as a teacher at High School 3; however, this study is completely separate from that role.

Background Information:
The purpose of this study is to explore how the way students feel about their ability to respond to new and challenging situations might be related to their language skills and whether or not age, gender, or GPA can help predict the way student feel about these same abilities.

Procedures:
If you agree to allow your child to be in this study, you are agreeing to release the data below and your child will be asked to:
- complete a 5 minute, 10 question online survey regarding their feelings about their ability to respond to new and challenging situations.
- I will then compare survey results to their self- reported SHEE ELA scores, gender, age, and GPA
- All their information will be confidential. No one will see their survey answers or self-reported scores and data except me.

Here are some sample questions:
____ I can always manage to solve difficult problems if I try hard enough
____ When I am confronted with a problem, I can usually find several solutions

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you want your child to be in the study. Of course, your child's decision is also an important factor. After obtaining parent consent, the researcher will explain the study and let each child decide if they wish to volunteer. No one at High School District will treat you or your

child differently if you or your child decides to not be in the study. If you decide to consent now, you or your child can still change your mind later. Any children who feel stressed during the study may stop at any time.

Risks and Benefits of Being in the Study:
Being in this project will be similar to taking other quick personality quizzes online. There are no known risks involved with taking this survey and no personal information will be disclosed. I am hoping this project might help others by showing it is important for students to feel confident in themselves and in school in order to learn more effectively. Your child will not receive payment for their participation.

Privacy:
Any information your child provides will be kept confidential. The researcher will not use your child's information for any purposes outside of this research project. Also, the researcher will not include your child's name or anything else that could identify your child in any reports of the study. Data will be kept secure by electronic password and random number assignment to each student rather than name. Data will be kept for a period of 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via alisa.wargo@waldenu.edu If you want to talk privately about your child's rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University staff member who can discuss this with you. Her phone number is 1-800-925-3368, ext. 1210. Walden University's approval number for this study is **01-27-16-0291632** and it expires on **January 26, 2017**. Please print a copy of this form for your records.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my child's involvement this optional research project. By clicking yes below and providing my electronic signature I consent to my child's participation. I understand that I am agreeing to the terms of the study described above as well as allowing self reported SHEE ELA scores, gender, age, and GPA data only be seen by the researcher for use with this study.

Appendix C: Assent Student Agreement Form

Hello, my name is Alisa Wargo, and I am doing a research project to learn about how the way students feel about their ability to respond to new and challenging situations might be related to their language skills. I obtained your contact information through High School District. I am inviting all 11th and 12th grade students at High School 1 and High School 2 to join my project. Please carefully read this form. I want you to learn about the project before you decide if you want to be in it.

WHO I AM:
I am a student at Walden University. I am working on my doctoral degree. I am a teacher at High School 3 within your school district; however, this study is completely separate from that role.

ABOUT THE PROJECT:
If you agree to be in this project, you are agreeing to release the data below and you will be asked to:
- All you need to do is complete a 5 minute, 10 question online survey regarding your feelings about your ability to respond to new and challenging situations.
- I will compare your survey results to your self-reported SHEE ELA scores, gender, age, and GPA
- All your information will be confidential. No one will see your survey answers or scores except me.

Here are some sample questions:
____ I can always manage to solve difficult problems if I try hard enough
____ When I am confronted with a problem, I can usually find several solutions

IT'S YOUR CHOICE:
You don't have to be in this project if you don't want to. If you decide now that you want to join the project, you can still change your mind later. If you want to stop, you can.

Being in this project will be similar to taking other quick personality quizzes online. There are no known risks involved with taking this survey and no personal information will be disclosed. I am hoping this project might help others by showing it is important for students to feel confident in themselves and in school in order to learn more effectively. You will not receive payment for your participation.

PRIVACY:
Everything you tell me during this project will be kept private. That means that no one else will know your name or what answers you gave.

ASKING QUESTIONS:
If you have any questions regarding this study, you or your parents can reach me at alias.wargo@waldenu.edu. If you or your parents would like to ask my university a question, you can call Dr. Leilani Endicott. Her phone number is 1-800-925-3368, ext. 1210. Please print a copy of this form for your records.

I understand that I am agreeing to the terms of the study described above as well as allowing me self-reported SHEE ELA scores, gender, age, and GPA data to be seen by the researcher for use with this study. Please click below to indicate your willingness to participate in this project:

Appendix D: Adult Consent Form

You are invited to take part in a research study of how the way students feel about their ability to respond to new and challenging situations might be related to their language skills. Your contact information was obtained through High School District. The researcher is inviting 11th and 12th grade students at High School 1 and High School 2 to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Alisa Wargo, who is a doctoral student at Walden University. You may already know this researcher as a teacher at High School 3; however, this study is completely separate from that role.

Background Information:
The purpose of this study is to explore the way students feel about their ability to respond to new and challenging situations might be related to their language skills and whether or not age, gender, or GPA can help predict the way student feel about these same abilities.

Procedures:
If you agree to be in this study, you are agreeing to release the data below and you will be asked to:
- complete a 5 minute, 10 question online survey regarding your feelings about your ability to respond to new and challenging situations.
- I will then compare survey results to your self-reported CAHSEE ELA scores, gender, age, and GPA
- All your information will be confidential. No one will see your survey answers or scores except me.

Here are some sample questions:
____ I can always manage to solve difficult problems if I try hard enough
____ When I am confronted with a problem, I can usually find several solutions

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you want to be in the study. No one at High School District will treat you differently if you decide to not be in the study. If you decide to consent now, you can still change your mind later. Anyone who feels stressed during the study may stop at any time.

Risks and Benefits of Being in the Study:

Being in this project will be similar to taking other quick personality quizzes online. There are no known risks involved with taking this survey and no personal information will be disclosed. I am hoping this project might help others by showing it is important for students to feel confident in themselves and in school in order to learn more effectively. You will not receive payment for your participation.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study. Data will be kept secure by electronic password and random number assignment to each student rather than name. Data will be kept for a period of 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via alisa.wargo@waldenu.edu If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University staff member who can discuss this with you. Her phone number is 1-800-925-3368, ext. 1210. Walden University's approval number for this study is **01-27-16-0291632** and it expires on **Januaray 26, 2017**. Please print a copy of this form for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement this optional research project. By clicking yes below I consent to my participation.   I understand that I am agreeing to the terms of the study described above as well as allowing my self reported SHEE ELA scores, gender, age, and GPA data only be seen by the researcher for use with this study.

Appendix E: Survey Invite Letter

Address Line: BCC all participants to ensure privacy
Subject Line: Research Participation Invite "Self-Efficacy and Language Development"
Email Message Body:
Dear Student,

My name is Alisa Wargo. I am a PhD student in the Education Department at Walden University. I am doing a research project to learn about how the way students feel about their ability to respond to new and challenging situations might be related to their language skills. I am inviting all 11th and 12th grade students at High School 1 and High School 2 to join my project. Please carefully read this email with your parents. I want you to learn about the project before you decide if you want to be in it.

WHO I AM:
I am a student at Walden University. I am working on my doctoral degree. I am a teacher at Heritage High School within your school district; however, this study is completely separate from that role.

ABOUT THE PROJECT:
If you agree to be in this project, you will be asked to:
- All you need to do is complete a 5 minute, 10 question online survey regarding your feelings about your ability to respond to new and challenging situations.
- I will then ask you for your SHEE ELA scores, gender, age, and GPA and compare this information with your survey answers.
- All your information will be confidential. No one will see your survey answers or scores except me.

Here are some sample questions:
____ I can always manage to solve difficult problems if I try hard enough
____ When I am confronted with a problem, I can usually find several solutions

IT'S YOUR CHOICE:
You don't have to be in this project if you don't want to. If you decide now that you want to join the project, you can still change your mind later. If you want to stop, you can.

Being in this project will be similar to taking other quick personality quizzes online. There are no known risks involved with taking this survey and no personal information will be disclosed. The only time I have to tell someone is if I learn that you intend to hurt

yourself or someone else. I am hoping this project might help others by showing it is important for students to feel confident in themselves and in school in order to learn more effectively. You will not receive payment for your participation.

PRIVACY:
Everything you tell me during this project will be kept private. That means that no one else will know your name or what answers you gave.

ASKING QUESTIONS:
If you have any questions regarding this study, you or your parents can reach me at alias.wargo@waldenu.edu. If you or your parents would like to ask my university a question, you can call Dr. Leilani Endicott. Her phone number is 1-800-925-3368, ext. 1210.

Please click the link below to be directed to the required consent forms and the survey. (Survey Link)

Thank you!

Appendix F: Permission to Use General Self-Efficacy Survey

Freie Universität Berlin

Freie Universität Berlin, Gesundheitspsychologie (PF 10),
Habelschwerdter Allee 45, 14195 Berlin, Germany

Fachbereich Erziehungs-
wissenschaft und Psychologie
- Gesundheitspsychologie -

Professor Dr. Ralf Schwarzer
Habelschwerdter Allee 45
14195 Berlin, Germany

Fax   +49 30 838 55634
health@zedat.fu-berlin.de
www.fu-berlin.de/gesund

Permission granted

to use the General Self-Efficacy Scale for non-commercial reseach and development purposes. The scale may be shortened and/or modified to meet the particular requirements of the research context.

http://userpage.fu-berlin.de/~health/selfscal.htm

You may print an unlimited number of copies on paper for distribution to research participants. Or the scale may be used in online survey research if the user group is limited to certified users who enter the website with a password.

There is no permission to publish the scale in the Internet, or to print it in publications (except 1 sample item).

The source needs to be cited, the URL mentioned above as well as the book publication:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp.35-37). Windsor, UK: NFER-NELSON.

Professor Dr. Ralf Schwarzer
www.ralfschwarzer.de

Appendix G: Table 3

Descriptive Statistics Dependent Variable: GSE Score

Age	Gender	NGPA	NELA	Mean	Std. Deviation	N
18<	Female	4.1 or above	405-450	30.8750	3.18198	8
			382-404	30.0000	1.73205	3
			Total	30.6364	2.80260	11
		3.6 - 4.0	405-450	30.4545	3.98406	11
			382-404	27.0000	3.91578	4
			Total	29.2353	4.02383	17
		2.6 - 3.0	382-404	27.0000	3.39116	5
			Total	28.8571	4.22013	7
		2.5 or below	405-450	28.3333	.57735	3
			382-404	29.6667	5.04645	6
			Total	29.2222	4.05518	9
		Total	405-450	30.4783	3.42278	23
			382-404	28.3889	3.91286	18
			275-349	29.0000	5.65685	2
			Total	29.5227	3.71977	44
	Male	4.1 or above	405-450	31.4286	2.63674	7
			Total	31.4286	2.63674	7
		3.6 - 4.0	405-450	32.0000	3.53553	5
			382-404	34.0000	2.82843	2
			Total	32.0000	3.42261	8
		2.6 - 3.0	405-450	30.5000	5.80230	4

			382-404	28.2500	3.50000	4
			Total	29.4444	4.30439	9
		Total	405-450	31.4118	3.51886	17
			382-404	30.5714	3.99404	7
			Total	31.0000	3.50999	26
	Total	4.1 or above	405-450	31.1333	2.85023	15
			382-404	30.0000	1.73205	3
			Total	30.9444	2.68924	18
		3.6 - 4.0	405-450	30.9375	3.80296	16
			382-404	29.3333	4.88535	6
			275-349	26.5000	2.12132	2
			Total	30.1200	3.99291	25
		2.6 - 3.0	405-450	31.2000	5.26308	5
			382-404	27.5556	3.28295	9
			Total	29.1875	4.13471	16
		2.5 or below	405-450	29.2500	1.89297	4
			382-404	30.1429	4.77593	7
			Total	29.8182	3.86829	11
		Total	405-450	30.8750	3.45066	40
			382-404	29.0000	3.97911	25
			275-349	28.6667	4.04145	3
			Not Taken	29.5000	.70711	2
			Total	30.0714	3.68829	70
2	Female	3.6 - 4.0	405-450	26.0000	2.82843	2
			Total	26.0000	2.82843	2

		Total	405-450	25.6667	2.08167	3
			Total	27.5000	4.04145	4
			Total	21.0000	8.48528	2
	Total	3.6 - 4.0	405-450	26.3333	2.08167	3
			Total	26.3333	2.08167	3
		Total	405-450	26.0000	1.82574	4
			382-404	24.0000	12.72792	2
			Total	25.3333	5.95539	6
Total	Female	4.1 or above	405-450	30.8750	3.18198	8
			382-404	30.0000	1.73205	3
			Total	30.6364	2.80260	11
		3.6 - 4.0	405-450	29.7692	4.08562	13
			382-404	27.0000	3.91578	4
			Total	28.8947	3.98462	19
		2.6 - 3.0	405-450	29.5000	6.36396	2
			382-404	27.0000	3.39116	5
			Total	28.3750	4.13824	8
		2.5 or below	405-450	28.3333	.57735	3
			382-404	30.1429	4.77593	7
			Total	29.6000	4.00555	10
		Total	405-450	29.9231	3.62130	26
			382-404	28.6316	3.94702	19
			275-349	29.0000	5.65685	2
			Total	29.3542	3.74444	48
	Male	4.1 or above	405-450	31.4286	2.63674	7

			Mean	Std. Dev	N
		Total	31.4286	2.63674	7
	3.6 - 4.0	405-450	31.1667	3.76386	6
		382-404	34.0000	2.82843	2
		Total	31.4444	3.60940	9
	2.6 - 3.0	405-450	30.5000	5.80230	4
		382-404	25.6000	6.65582	5
		Total	28.0000	6.11010	10
	2.5 or below	Total	32.5000	.70711	2
	Total	405-450	31.1667	3.56865	18
		382-404	28.6250	6.63190	8
		Total	30.2857	4.57738	28
Total	4.1 or above	405-450	31.1333	2.85023	15
		382-404	30.0000	1.73205	3
		Total	30.9444	2.68924	18
	3.6 - 4.0	405-450	30.2105	3.93812	19
		382-404	29.3333	4.88535	6
		275-349	26.5000	2.12132	2
		Total	29.7143	3.98940	28
	2.6 - 3.0	405-450	30.1667	5.34478	6
		382-404	26.3000	5.03433	10
		Total	28.1667	5.18198	18
	2.5 or below	405-450	29.2500	1.89297	4
		382-404	30.5000	4.53557	8
		Total	30.0833	3.80092	12

Total	405-450	30.4318	3.61134	44
	382-404	28.6296	4.75676	27
	275-349	28.6667	4.04145	3
	Not Taken	29.5000	.70711	2
	Total	29.6974	4.06618	76