BELIEFS AND QUALITIES OF FAMILIES OF LOW-SOCIOECONOMIC STATUS THAT PROMOTE STUDENT SUCCESS IN SCHOOL

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ABSTRACT

There is a high probability that growing up having a low socioeconomic status (SES) leads to academic struggles and the continuance of the cycle of poverty. It is imperative to close the achievement gap of students of low SES. Schools need to understand the impact that the home environment has on the academic success of its students. The purpose of this qualitative study was to focus on low SES students who have shown academic success in school and to determine how the home environment impacted that success. Ten families from a low-income housing development adjacent to an elementary school were chosen to be interviewed. Student academic success was defined in two ways:

1. Eight of the ten parents were chosen based on how well their child performed on state assessment tests and the high level of their grades in math and reading.
2. Two of the ten parents were chosen based on the high improvements their child made on state assessment tests.

Teachers from the elementary school also filled out a questionnaire to determine their understandings and beliefs about student success.

The results from the study showed that many of the things low SES families did to positively affect their child's learning closely aligned to the things done by middle and upper SES families. The importance of education and belief in education was as high a priority for these low SES families as it is for most middle and upper SES families. The results give other low SES families concrete strategies that they can apply to their own families that increase the probability of student success. The results also challenge schools to not only build a culture of learning during the school day, but to also extend that culture to the families they serve.
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What qualities outside of the school environment of low SES students impact success in school?

Parent involvement in learning

Resources in the home

Television

Family support

Religion

Marital status

Family time

Living in poverty

What beliefs in the home environment of low SES students impact success in school?

Discipline

High expectations
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CHAPTER 1

Introduction

This chapter introduces the research problem by considering poverty in the United States as it relates to children, and it specifically focuses on children’s poverty in Hawai‘i. The purpose of the study and the research questions are presented next, along with the definitions of various terms that will help to provide clarity for the individual research questions.

Problem Statement

United States children living in high poverty areas are on the rise from 8.7% in 2000 to 10.6% in 2010. That is a 25% increase over a 10 year span. This increase equates to 8 million children under the age of 18 living in neighborhoods of high poverty (Mather & Dupuis, 2012). Compounding the problem is the fact that these numbers are calculated of children in high poverty neighborhoods, which is a subset of all children living in poverty. Poverty status is measured by taking the annual income of a family and comparing it against thresholds that vary by the number of members in the household and the number of children. Poverty thresholds are calculated annually, and they are dependent upon the cost of living which is measured using the Consumer Price Index (U.S. Department of Commerce, 2011). In 2003, 12.9 million children in the U.S. under the age of 18 were living in poverty (US Census Bureau, 2004). Most recently, in the 2010, the United States Census Bureau reported that the child poverty rate was 21.6% (American Community Survey Office, 2010). Of all the children in the U.S., an estimated 1.1 million more children were living in poverty in 2010 than in 2009. In total, there were 15.75 million children in the United States living in poverty. That means more than one in five children are dealing with the effects of poverty (U.S. Department of Commerce, 2011). It is estimated that childhood poverty costs the United States $500 billion a year whether by direct costs like educational programs or indirect costs associated with juvenile crime (Holzer, Schanzenbach, Duncan, & Lugwig, J., 2007). It also costs individuals in a significant manner. Dropping out of school can cost an individual anywhere from $20,000-$200,000 a year in reduced annual income.
Hawai‘i’s statistics on poverty fared slightly better than the United States as a whole in 2010. However, Hawai‘i did see its highest level of poverty in 2009, with 156,000 people living in poverty. It’s the third consecutive year of increase (Vorsino, 2010). There were approximately 41,230 or 13.9% of children under the age of 18 who were living in poverty (U.S. Department of Commerce, 2011). However, in just one year, 2011 data showed that the percentage had jumped to 17%, increasing the number of children in Hawai‘i living in poverty by over 9,000 children (Annie E. Casey Foundation, 2013; Depledge, 2013).

Research has shown that living in poverty has always had a huge impact on education. Most of the research has shown that poverty and an impoverished home environment have a negative impact on the cognitive level and academic success of students (Bradley & Corwyn, 2002; Ram & Hou, 2003).

**Purpose of Study**

The purpose of this qualitative study was to focus on low SES families to find out what strategies and beliefs contribute to their child(ren)’s academic success. The home environment is the greatest predictor of academic success when it comes to children ages 3-8 (Molfese, DiLalla, & Bunce, 1997). Children stay in school for approximately seven hours a day for 180 days out of the year, and therefore, the majority of a child’s life is spent at home. Thus, the impact that the home environment has on a child’s academics is significant. “Intellectual stimulation and experiences outside of the school have as much or more to do with achievement, readiness, and success than that which occurs in school” (Paredes, 2011, para. 1).

“Most children raised in chronic poverty enter the public education system with extensive academic and socio-cultural limitations and overcoming these disadvantages becomes the life work of inner-city educators” (Paredes, 2011, para. 4). Given such high poverty rates in the United States, the consequences of growing up poor and its relation to a child’s future success have emerged as an important research topic. Schools need to understand the impact that the home environment has on the academic success of their students. By hearing from the families themselves, schools can gain a greater
understanding of the impact that the home environment plays on learning. This deeper understanding can lead to the implementation of practices that increase student achievement, and it can also improve school-home relationships that increase the chance of academic success for children living in poverty.

Based on two meta-analyses of 32 studies into the effects of a child’s SES and home environment on learning, Hattie (2009) showed that the home environment has a large effect on a child’s learning by approximately +/- 1.5 years. In other words, if a child comes from a supportive home environment, they could advance in learning as much as a year and a half in a year’s time, as opposed to regressing as much as a year and a half coming from an impoverished home environment.

Despite the overwhelming research that shows a positive correlation between SES and academic success, there are children from low SES families who do well academically. There is also research that shows very little effect of SES on academic success (Molfese et al., 1997). In fact, there are children who come from low SES families who far exceed the academic success of their higher SES peers (Caldwell & Ginther, 1996); So why do some low SES children succeed despite the financial, social, emotional, familial, and academic challenges they face? Do these children and families have anything in common?

**Research Questions**

This study considered the impact of the environment outside of the school day on academic success. More specifically, this study focused on low SES students who have shown academic success in school by asking the following questions:

1. What qualities outside of the school environment of low SES students impact success in school?
2. What beliefs in the home environment of low SES students impact success in school?
3. How do Mindset Theory and Resilience Theory relate to the success of students of low SES?
Definitions

Academic success. Academic success is defined by using two measures. The first measure is classroom grades. An academically successful student has only Meets with Proficiency (MP's) and/or Meets with Excellence (ME's) on their report cards. They will not have any Developing Proficiency (DP's) or Well Below Proficiency (WB's) on their report cards. In addition to their report card grades, an academically successful student is a student meeting proficiency (300+) in both reading and math on the Hawai'i State Assessment (HSA).

Qualities outside of the school environment. These qualities outside of the school environment would be anything that occurs outside of the structured school day. For example, sending a child to after school care or after school sports would be considered outside of the school environment. Although these events may occur on the school campus, it is not something that is required of every student; and the decision to provide after school structure to a child's life, originated from the parents. Qualities outside of the school environment consider qualities from the home and community. These qualities that affect success in school would be anything that is observable, actionable or concrete. For example, studying after school everyday or going to the community learning center would be observable and actionable evidence. A concrete quality example would be having dictionaries or books in the home.

Beliefs in the home environment. Beliefs that affect academic success would be defined as opinions or convictions. These opinions and convictions about learning are not so easily observable, but it may contribute to the decisions and actions a parent may take. An example of a belief would be a parent sharing that they consistently encourage their child to never give up.

Low SES student. A low SES student is any student living in one of Hawai'i's Public Housing Developments. Considering students living in a public housing development would guarantee that families are of low SES. The median income for a family of four in Honolulu is $71,300. A family of four could live in public housing if they make fewer than 80% of the median household income which is $57,050. The very
low income threshold is at 30% or $35,650 for a family of four (Hawaii Public Housing Authority, 2006).

**Conclusion**

The number of families living in poverty is increasing in this nation, and therefore, the number of children dealing with low SES is also increasing. That has an immense impact on their learning (Bradley & Corwyn, 2002; Duncan, Yeung, Brooks-Gunn, & Smith, 1998; Hattie, 2009; Ram & Hou, 2003; Vail, 2004). Understanding how families from low SES overcome their academic challenges helps to gain insight into strategies and beliefs that can help other families in similar situations.

The next chapter will begin to frame this research by putting poverty and education into historical context. Theories on poverty and learning will be addressed, along with the latest research on brain plasticity and its implications on learning.
CHAPTER 2
Literature Review

Introduction

The literature review includes a general overview of historical studies on poverty and education that have spurred legislative action both on the national and Hawai‘i state level.

The literature review then looked at the research on the affects of poverty on student learning, and then more specifically, how the home environment affects student learning. The latest studies on the brain were considered to understand brain plasticity and brain development to address the Nature vs. Nurture debate and whether students of poverty are destined to fail.

Finally, theories like the Resilience, Success, and Mindset Theory was considered to create the lens through which this study was focused.

United States Historical Research on Poverty and Education

It was not until 1965 that the federal government got involved in trying to deal with the affects of poverty on education. Through President Lyndon B. Johnson and his War on Poverty, the Elementary and Secondary Education Act (ESEA) was enacted. Amongst its various goals like emphasizing equal access to education, professional development, and providing instructional materials, it also had the goal of decreasing the achievement gaps.

Part of the ESEA is Title I – Improving the Academic Achievement of the Disadvantaged. “The purpose of this title is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments” (U.S. Department of Education, 2004, para. 1). Part of this purpose was to meet the educational needs of low-achieving children in our nation's highest-poverty schools.

During the Civil Rights Act of 1964, a sociologist named James Coleman became the first social scientist commissioned by Congress to carry out research that specifically
informed government policy (Marshall, 1998). Racial tensions were high in the United States with the political push from the president to desegregate all public schools. The intent of the Coleman Report was to prove that there were major differences in the schools that blacks went to and that black students did not achieve as well as white students because of the inequality of resources. The Coleman Report also intended to prove that black students achieved more when in class with white students.

Coleman and his team of researchers surveyed 600,000 students and 60,000 teachers who completed verbal and mathematical ability tests and filled out questionnaires that sought to find out their home environment and economic status. The findings in the Coleman Report were somewhat unexpected. The report noted the following:

Not only were there no major differences within geographical regions between schools attended by Negroes and whites, but that even those school differences that did exist did not markedly affect achievement.... Furthermore, the report said it was not race but social-economic class and family background that mattered when it came to integration. (Grant, 1973, p. 23)

The unintended results from this massive groundbreaking social/political research was contrary to the civil rights movement; and it also revealed that money spent on compensatory programs of the ESEA were being spent on things that did not affect student achievement. The Coleman Report concluded that whether by race or SES, educational inequalities resulted in an achievement gap (Coleman, 1966). Ultimately, the civil rights movement moved forward with the desegregation of schools as the pundits and media spun the Coleman Report to suit their needs.

More recently, the data from the Coleman Report has been further scrutinized and re-analyzed:

Some of the studies done as part of a re-analysis of Coleman's data at Harvard reached similar conclusions, suggesting that the best way to improve academic achievement was neither to integrate students nor to offer compensatory programs but, rather, to raise overall family income.... In other words, when it came to improving academic achievement in the inner city, what mattered most was
neither special programs nor racial integration but, rather, family background and socio-economic status. (New York State Education Department, 2009)

Another re-analysis of the Coleman Report by Rury and Saatcioglu (2015) concluded that, “Even with its limitations, his measure of ‘Economic Level’ combined with parental education indicators was robust enough to demonstrate that socio-economic status was the principal determinant of educational success” (para. 22).

The data from the Coleman Report proved one very important point - race alone had very little to do with achievement, and that the home environment and socioeconomic status of students played a larger role in affecting student achievement.

**Hawai‘i Historical Research on Poverty and Education**

In a book about breaking the cycle of poverty, Neuman (2009) suggested that federal spending on education was the main driver to addressing the inequities in funding. However, evidence points to the contrary. The fact remains that school districts with families from higher SES and higher property values have more funding for their schools (Darling-Hammond, 2007). Despite the increase in federal spending on public education, this amount accounted for only 10.5% of funding for schools, and the balance was the responsibility of local and state entities (U.S. Department of Education, 2004).

Hawai‘i has the only public school system created by a sovereign monarch – King Kamehameha III. It is the oldest public school system west of the Mississippi River and was created in 1840 (Hawaii State DOE, n.d.). All 50 states, except Hawai‘i, have multiple Local Education Agencies (LEA) within each state based on locale. Hawai‘i, despite its multiple islands and different communities, is the only statewide education system in the United States. The Hawai‘i Department of Education is governed by one Board of Education. The majority of school funding comes from taxes appropriated by the legislature, and because of this, “education is Hawai‘i’s second-largest single expense, accounting for about 30 percent of the state's general fund budget. It costs the state about $2.5 billion to run the Hawaii Department of Education” (“Hawaii department of education budget,” 2013, para. 1). Hawai‘i schools, belonging to one school system, aims to prevent schools in poorer areas from getting less funding than a school in a more
affluent area. It was meant to level the playing field where schools get an equal amount of funding whether a school is in a wealthy or poor neighborhood ("Special Comment," 2010). Every school in the state receives the same per pupil allocation.

**SES Factor: Home Environment**

Consider how the home environment and the level of SES affect learning. One study compared the changes in reading and mathematics scores from a year of schooling to a summer of no schooling (Entwisle, Alexander, & Olson, 2005). This study involved 650 students from grades 1-5 of varying SES (See Table 2.1). It considered the composite average reading and math scores on the CAT – California Achievement Test.

<table>
<thead>
<tr>
<th>SES</th>
<th>1st Grade</th>
<th>2nd Grade</th>
<th>3rd Grade</th>
<th>4th Grade</th>
<th>5th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>329</td>
<td>375</td>
<td>397</td>
<td>433</td>
<td>461</td>
</tr>
<tr>
<td>Middle</td>
<td>348</td>
<td>388</td>
<td>425</td>
<td>467</td>
<td>497</td>
</tr>
<tr>
<td>High</td>
<td>361</td>
<td>418</td>
<td>460</td>
<td>506</td>
<td>534</td>
</tr>
</tbody>
</table>

During the baseline test, the research showed the different levels of test scores and its positive correlation to SES. Note that there was already an achievement gap in grade one when comparing students by SES. Also note that as children moved up in grades, the achievement gap between low SES and high SES students increased from 32 points in 1st Grade to 73 points in 5th Grade.

<table>
<thead>
<tr>
<th>SES</th>
<th>1st Grade</th>
<th>2nd Grade</th>
<th>3rd Grade</th>
<th>4th Grade</th>
<th>5th Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>55</td>
<td>46</td>
<td>30</td>
<td>33</td>
<td>25</td>
<td>189</td>
</tr>
<tr>
<td>Middle</td>
<td>69</td>
<td>43</td>
<td>34</td>
<td>41</td>
<td>27</td>
<td>214</td>
</tr>
<tr>
<td>High</td>
<td>60</td>
<td>39</td>
<td>34</td>
<td>28</td>
<td>23</td>
<td>184</td>
</tr>
</tbody>
</table>
During the school year, schools tend to have a greater impact on learning when compared to the summer months when the home environment plays a greater role. School year gains showed that SES had very little to do with learning. Most gains were made by the middle SES students followed by the low SES students. This dispelled the notion that higher SES students are smarter than low SES students (See Table 2.2).

Table 2.3 - Test Score Gains Over The Summer

<table>
<thead>
<tr>
<th>SES</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Grade</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Grade</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; Grade</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>-3.67</td>
<td>-1.7</td>
<td>2.74</td>
<td>2.89</td>
<td>0.26</td>
</tr>
<tr>
<td>Middle</td>
<td>-3.11</td>
<td>4.18</td>
<td>3.68</td>
<td>2.34</td>
<td>7.09</td>
</tr>
<tr>
<td>High</td>
<td>15.38</td>
<td>9.22</td>
<td>14.51</td>
<td>13.38</td>
<td>52.49</td>
</tr>
</tbody>
</table>

The greatest disparities came over the summer where the home environment played a large factor in a student’s learning (See Table 2.3). There were large achievement gaps between the test score gains of students after they returned from summer. The greatest achievement gap occurred at the first grade level with low SES students showing an average gain of -3.67 points and high SES students averaging gains of 15.38 points. The achievement gap was wide when considering the cumulative effect over time of the summer home environment and SES.

A study sponsored by the U.S. Department of education considered homework that was done outside of the school setting and surveyed families of over 50,000 students grades K-12. These families were separated between poor and non-poor. “Students [were] considered poor if living in households with incomes below the poverty threshold, which is a dollar amount determined by the federal government to meet the household’s needs, given its size and composition” (Noel, Stark, & Redford, 2013, p. 12).
Table 2.4 - Homework Statistics by SES

<table>
<thead>
<tr>
<th>SES Status</th>
<th># of students in K-12</th>
<th>Student does HW outside of school</th>
<th>Place in home is set aside for HW</th>
<th>Adult in household that checks HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>10,333</td>
<td>94%</td>
<td>84%</td>
<td>72%</td>
</tr>
<tr>
<td>Non-poor</td>
<td>41,878</td>
<td>96%</td>
<td>86%</td>
<td>66%</td>
</tr>
</tbody>
</table>

The data suggested that there was little difference in doing homework and supporting the completion of homework with a designated homework area in the home when comparing students by SES. The data also suggested that there was greater support in the home by families of low SES checking that homework was complete.

**SES Factor: Parent Involvement**

There is clear evidence that increased involvement by parents positively correlates to student achievement. When parents get involved in their child’s education, “students tend to earn higher grades, attend school more regularly, stay in school longer, and enroll in higher level programs” (Van Roekel, 2008, p. 1). Parental involvement reduces the chances that a student qualifies for special education or repeats a grade (Anderson, 2000). Parental involvement communicates to the child that what they are engaged in at school is important, and how a child does in that environment is important. It can also communicate an expectation of the child to do well in school when parents take an interest in the school activities that their child engages in.

In an effort to increase student achievement, educators have constantly pushed for policies that promote parental involvement in their child’s education (Abrams & Gibbs, 2002). The U.S. Department of Education (2004) has stated that parental involvement is a key factor in creating successful schools and increasing student achievement. Federal Title I programs reinforce this belief by requiring schools to engage parents at the school level. They do this by providing funds specifically aimed at getting parents to school by allowing funds to be used for supplies and food for parent functions. Teachers and principals continually seek ways to get parents involved in their child’s education, as
researchers continue to draw the conclusion that students achieve more as parental involvement increases (Epstein, 2001).

Despite the research and the efforts by policymakers and school level personnel, schools that serve low SES communities continue to struggle with parental involvement because school structures are more conducive to middle-class families (Goodwin & King, 2002). Rates of parental involvement are lower in low-income communities than in higher income ones (Abrams & Gibbs, 2002; Lareau, 2000; O'Connor, 2001). It follows that “low-income children with less involved parents, often experience fewer of the academic benefits than children coming from higher income homes.... For these children, rather than acting as a benefit, the lack of involvement by their parents only leaves them farther behind their higher income counterparts” (Smith, 2006, p. 44). Low SES students are the very students who need the additional help and support to counteract the other stressors that low SES students are challenged with on a daily basis.

Understanding how schools can involve families of low SES is an important component in trying to close the achievement gap that permeates this nation’s schools. Hoover-Dempsey and Sandler (1995) suggested that there are a multitude of demands that parents deal with on a daily basis that take up time and energy. Employment and other family responsibilities are the primary influence on how they get involved at the school level. And generally speaking, they suggest that it is not whether parents believe they should be involved in their child’s education, but how they get involved.

Parental involvement in the traditional sense tends to involve the physical presence of parents at the school. Joining PTA organizations, volunteering at school events and meetings, chaperoning, etc. are all examples of parent involvement in the school. Traditional parental involvement at home also includes, but not limited to, making sure their child completes their homework assignments, exposure to enrichment activities, and making sure their child is equipped to learn. These examples of parental involvement are deliberate and overt, and middle and higher income parents are better suited to carry out these parental involvement activities (Mapp, 2003). Despite this, schools still try to involve low SES parents in their child’s education using traditional
activities. In addition, many state and federal policies support and promote the traditional ways that parents can get involved.

Jeynes (2005) showed that the traditional definition of parental support is far more elaborate than previously noted. Meta-analyses showed that low SES parents get involved in more subtle ways like having high expectations of their child, communicating with them, and the style of parenting, compelling more research into how families of low SES backgrounds promote academic success. For example, having high expectations is far more powerful than volunteering at a school event, which is momentary. An expectation is something that follows a child in and out of school and is continuous. In addition, the expectation to do well is far more relevant and urgent to children of low SES due to the context in which they live.

Studies have shown that low SES parents have the same desire, as higher income parents, to want their children to be successful in school. They value education just as much as their higher income peers (Lareau, 2000). Lower-SES parents academically support their children in more non-traditional ways because they also have to navigate through the difficult social context in which they live. These non-traditional ways of support can often times be misinterpreted as apathy or inability (Compton-Lilly, 2003). Increasing parental involvement of low SES families is far more complicated than simply having organizations and activities at the school level that invite parents to come. There are subtle barriers that need to be addressed. One barrier that sometimes exists is the perspectives that school personnel take and their lack of relationships with families. Refocusing on the strengths that families can bring to a child’s academic success rather than the challenges low SES families bring to the table (Amatea, Smith-Adcock, & Villares, 2006), and valuing what parents can do to help their child “regardless of their own formal educational experiences” (Raffaele, 1999, p. 448) help to create an inviting foundational atmosphere for schools serving low SES communities.

Expectations that parents have for their children have a huge impact on the academic success of their child. This expectation in the primary years tends to have a lasting effect throughout a child’s educational career (Entwisle et al., 2005). Considering the expectation of parents, 88% of parents who make over $75,000 a year expect their
children to attain a 4-year college degree compared with 50% of parents making less than $25,000 a year (Child Trends, 2013).

Data from the U.S. Department of Education suggested similar findings (Noel et al., 2013). The data suggested a difference between families of different SES. Lower SES families had a higher expectation for their children to either drop out of school before high school, graduate with a high school degree, graduate from a vocational or technical school, or graduate from a two year college. Families of higher SES had a higher percentage of families expecting their child to complete a four or five year college to go on to get a graduate or professional degree.

Table 2.5 - Parental Educational Expectations by SES

<table>
<thead>
<tr>
<th>SES Status</th>
<th># of students Grades 6-12</th>
<th>&lt; high school diploma</th>
<th>Graduate from high school only</th>
<th>Vocational or technical school</th>
<th>2+ years of college</th>
<th>4 or 5 year college degree</th>
<th>Graduate or professional degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>4,614</td>
<td>3%</td>
<td>17%</td>
<td>11%</td>
<td>20%</td>
<td>17%</td>
<td>32%</td>
</tr>
<tr>
<td>Non-poor</td>
<td>21,744</td>
<td>1%</td>
<td>7%</td>
<td>8%</td>
<td>17%</td>
<td>30%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Research also showed that a parent’s expectation of their child’s academic success had a greater impact on their learning when compared with other parental involvement factors (Fan, 2001; Jeynes, 2005; Jeynes, 2007; Redd, Guzman, Lippman, Scott, & Matthews, 2004). More specifically, higher expectations for learning tended to create a higher probability that parents would provide greater outside support for learning through lessons, tutoring, etc. (Entwisle et al., 2005). Students who reported that their parents had high expectations of them in school showed greater attendance and a positive outlook towards school (Astone & McLanahan, 1991).

**SES Factor: Health**

There are many factors that affect students living in families of low SES. Such things like parental involvement, home environment, nutrition, and medical care are just a few things that make it challenging for low SES students to achieve (Milne & Plourde,
Attendance also had a large impact on achievement. If students are not in school, they are not accessing their education. Chronic absenteeism is common with students of low SES. The consistency of a student’s attendance in school and the total years that a student actually completes, is often related to their SES. Different factors contribute to chronic absenteeism, like poor access to healthcare which increases illness, lack of medicines that increase the duration of illness, and lack of resources for transportation to school or medical care. Approximately 20% of low SES children do not have the necessary immunization shots to prevent serious illnesses. When chronic absenteeism occurs in kindergarten, it is a high predictor of low achievement in the fifth grade (Knitzer & Lefkowitz, 2006).

**SES Factor: Resources**

A family’s income directly affects the types and amounts of stimulating educational materials in the home. Children from higher SES homes benefit from higher levels of intellectual stimulation whether it is through educationally stimulating materials or conversations in the home. This cognitive development has the most influence in the preschool and elementary grade levels (Smith, Fauth, Brooks-Gunn, Fauth, & Brady-Smith, 2002).

Educational activities and experiences outside the school varied amongst the different SES levels (See Table 2.6). The data suggested that children from higher SES homes gained a wider variety of experiences (Noel et al., 2013).

<table>
<thead>
<tr>
<th>SES Status</th>
<th># of students K-12</th>
<th>Visited library</th>
<th>Visited bookstore</th>
<th>Live show play, or concert</th>
<th>Museum, art gallery, or historical site</th>
<th>Zoo or aquarium</th>
<th>Community, religious, or ethnic event</th>
<th>Sporting or athletic event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>10,333</td>
<td>42%</td>
<td>28%</td>
<td>23%</td>
<td>17%</td>
<td>22%</td>
<td>51%</td>
<td>35%</td>
</tr>
<tr>
<td>Non-poor</td>
<td>41,878</td>
<td>39%</td>
<td>40%</td>
<td>33%</td>
<td>22%</td>
<td>18%</td>
<td>55%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Table 2.6 - Participation in Activities by SES
SES Factor: Cognitive Development

Infant and toddler language abilities develop at varying rates. There is at least a two year window in which children variably tend to speak their first words. Some children catch up to their peers, while others continue to struggle with language acquisition and continue on a lower trajectory of language development (Fernald & Marchman, 2012). Whether SES was considered in relation to health factors, parent education levels, parent expectations, or cognitive engagement, research has shown that SES has a huge impact on children’s differences in language development and cognitive abilities (Hart & Risley, 2003; Walker, Greenwood, Hart, & Carta, 1994; Jensen, 2009; Noble et al., 2005; Lee & Burkam, 2002).

Exposure to vocabulary before the age of 4 creates the foundation for learning that children need for their future intellectual development. Lack of this exposure to vocabulary increases the risk of a child failing in school (Walker et al., 1994). A recent study looked at the language ability of preschool aged children in the Federal Head Start Program that serve families of low SES. The study found that as many as 65% of the students displayed clinically significant delays in language ability (Nelson, Welsh, Trup, & Greenberg, 2011). Even within low SES populations, there were different levels of language abilities that correlated with the depth of their poverty (Fernald, Weber, Galasso, & Ratsifandrihamanana, 2011). By the time children enter kindergarten, there are already achievement gaps that directly correlate to SES. Children from higher SES backgrounds have an advantage over their lower SES classmates in both verbal and cognitive abilities (Ramey & Ramey, 2004). These differences in verbal and cognitive abilities had a strong correlation to how these children succeeded in school and in life. The fact that these differences in cognitive abilities were already present in the preschool years meant that they began at an even younger age. However, when do these differences begin? Are they simply genetic or do children’s environment play a role in these differences?

One explanation for why it is not simply genetic, lies in the perisylvian brain region that is involved with language processing. Language processing primarily begins after birth, and it tends to take a longer period of time to develop than the other regions of
the brain (Noble et al., 2005). This longer period of time to develop creates a larger window of time that language acquisition is affected by the environment surrounding the child. Similarly, with regard to behavior, many child development experts agree that it is both genes and the environment that play a role in shaping a child (Jensen, 2009). Genes begin the process, but the environment continues to shape it. Behavioral geneticists commonly claim that DNA accounts for 30-50 percent of our behaviors (Saudino, 2005). Thus, the environment accounts for 50-70 percent of a child’s intellectual development.

There was also research into the language problems of twins that point to the significant impact that the environment had on their learning. The environmental factors of living in the same family outweighed the genetic impact on their language development. In fact, researchers found that 60% of the differences in cognitive abilities of twins from varying SES came from the environment, and close to no effect came from genetics. Interestingly, for higher SES children, the opposite is true (Turkheimer, Haley, Waldron, D’Onofrio, & Gottesman, 2003; Oliver, Dale, & Plomin, 2004). Hart and Risely (2003) studied children as young as seven months old and followed them for two and a half years to determine when the differences in the acquisition of vocabulary begin. Hart and Risely studied 42 families of varying SES backgrounds for one hour a month to try to explain the varying degrees of language accomplishments that they saw in three year olds (See Table 2.7). One of the findings showed practically a direct correlation between the level of a parent’s vocabulary and that of their child. *The apple does not fall far from the tree* in that all 42 children turned out to be just like their parents. Upwards of 86-98% of a child’s vocabulary matched that of their parents. Even the average amount of words used and the different words used per hour were also very similar between parent and child.

The data also showed that the three year olds from families on welfare not only had smaller vocabularies than did three year olds in professional families, but welfare children were also learning new vocabulary words at a slower pace. It is important to note, the magnitude of the differences in children’s cumulative experience before the age of three gives an indication of how big the problem is. “Estimating the hours of intervention needed to equalize children’s early experience makes clear the enormity of
the effort that would be required to change children’s lives. And the longer the effort is put off, the less possible the change becomes” (Hart & Risley, 2003, p. 9).

Table 2.7 - Families’ Language and Use Across Income Groups

<table>
<thead>
<tr>
<th>Family SES</th>
<th>13 Professional</th>
<th>23 Working-Class</th>
<th>6 Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures and Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest score*</td>
<td>Parent</td>
<td>Child</td>
<td>Parent</td>
</tr>
<tr>
<td>Recorded vocabulary size</td>
<td>2176</td>
<td>1116</td>
<td>1498</td>
</tr>
<tr>
<td>Avg. utterances per hour</td>
<td>487</td>
<td>310</td>
<td>301</td>
</tr>
<tr>
<td>Avg. different words per hour</td>
<td>382</td>
<td>297</td>
<td>251</td>
</tr>
</tbody>
</table>

* Parents were given the Peabody Picture Vocabulary Test (PPVT). Parent performance on the test was highly correlated with years of education.

Children from low SES, on average, hear 13 million words by the age of four. Families of middle class SES, on average, expose their children to 24 million words by age four; almost twice the amount. In addition, children from upper class SES families heard 46 million words during the same time frame. That is almost twice the amount of words when compared to a middle class family. Moreover, when compared to children from low SES families, they heard more than three times as many words. Similarly, another study showed that by age 3, children in high-income families are exposed to 30 million words at home compared with only 10 million in low-income households (Hart & Risley, 1995). In fact, Bracey (2006) adds that toddlers from middle and upper SES families spoke more words a day than mothers from low SES backgrounds spoke to their own children. These are confounding differences that put children from low SES backgrounds at such large disadvantages before they even begin formal schooling. “A child’s vocabulary is part of the brain’s tool kit for learning, memory, and cognition. Words help children represent, manipulate, and reframe information” (Jensen, 2013, para. 12).
Given the vast amount of differences in the words that children are exposed to by age 4, there are obvious differences in the words that they have spoken. By the time a child starts school, children from low SES backgrounds have spoken about 2.5 million words. Children from higher SES backgrounds have spoken almost twice as many words at about 4.5 million. This is a distinct difference in what children bring with them to school (Hart & Risley, 1995). There are huge gaps between the different SES families.

A recent study by Fernald, Marchman, and Weisleder (2013) looked at the impact that SES had on language development. They specifically studied the developmental changes in the efficiency of language processing and vocabulary learning. “The most important findings were that significant disparities in vocabulary and language processing efficiency were already evident at 18 months between infants from higher- and lower-SES families, and by 24 months there was a 6-month gap between SES groups in processing skills critical to language development” (p. 234).

Early educators teaching children from low SES families often found that their students lacked the readiness skills that middle to high SES families often provided for their children. Research indicated that children from low SES households and communities developed academic skills more slowly compared to children from higher SES groups (Morgan, Farkas, Hillemeier, & Maczuga, 2009). This had a snowball effect as children felt inadequate or left out, which often leads to a lack of participation for fear of looking stupid (Jensen, 2013). Early childhood learning experiences have a tremendous impact on the success or failure of children, and ultimately, this will impact their future lives. Understanding what families in low SES communities do during this essential period of time is essential to helping these families break the cycle of poverty. Gaining an understanding of how families navigate the world of poverty and still produce children who are academically successful, can help other families to lay the foundation of success even before the first day of school. It is imperative to find out what children and families need to do to close the achievement gap.

Overall, 22% of children who live in poverty do not graduate from high school. This compared to 6% of children who have never lived in poverty. The data shows that students who have experienced at least one year of poverty and were not reading
proficiently by third grade, increased the probability of dropping out of school to 26%. When you consider a child living in poverty for more than half of their childhood, the chance of dropping out of high school increased to 32% ("NAEP - 2009 reading: Grade 4 national results," n.d.). Hawai‘i also showed correlations between SES and graduation rates. Amongst five high schools that were considered, the two schools with the highest poverty rates had the lowest graduation rates ("The education gap," 2009).

Thousands of studies showed this negative correlation between poverty and academic success, and it transcends ethnicity (Berliner, 2006). Gelberg (2008) suggested that the two greatest hurdles for children in school is a serious learning disability and childhood poverty. Children who came from families living in poverty tended to read and be read to less, had more meals alone, received less praise, and were more likely to live in a neighborhood where it was not safe to go out and play. They were also less likely to participate in sports, lessons, or clubs. Their parents were more likely to be less educated, never married, and more focused on the present rather than focusing on the importance of the future. Children coming from these families were more likely to be academically behind their higher SES peers (Dye & Johnson, 2007).

In the book *Visible Learning*, Hattie (2009) analyzed multiple meta-analyses and combined their results to create a list of statistical effects on learning. His analysis considered various aspects of a child’s life, and ranked them according to how it affected a child’s learning. This analysis of meta-analyses was categorized into six research categories: student, home, school, teacher, curricula, and teaching. One of the factors analyzed within these categories was SES. SES and home environment were the two highest factors that affected a student’s ability to learn.

Hattie created a unique and powerful way to analyze multiple meta-analyses and quantify their impact on learning.
On the barometer of influence there are four categories that an analysis of combined meta-analyses can fall in:

**Reverse Effects** *(d = -0.2 - 0.0)* – This zone has the reverse effect and is detrimental to a child’s learning.

**Developmental Effects** *(d = 0.0 - 0.15)* – This zone has basically no effect on a child’s learning and this is the amount a child would improve with no schooling.

**Teacher Effects** *(d = 0.15 - 0.4)* – This zone has a positive effect on a child’s learning, and it is the amount a child learns in a typical year of school.

**Zone of Desired Effects** *(d = 0.4 - 1.2)* – This zone is where gains are made beyond what an average year of schooling can do.

Three main indicators of a person’s SES referred to their income, education, and occupation. Four SES meta-analyses were studied that involved 499 studies and 176,915 participants. Effect of SES on learning was *d* = .57, which falls within the **Zone of Desired Effects**. It is important to note that these results showed the positive impact middle to high SES has on learning. Therefore, the opposite would be true for families of low SES. Similarly, home environment also had an effect on learning. Like the previous analysis, these studies measured the effect that a positive (i.e., nurturing, supportive) home environment had on learning. There were two meta-analyses involved, which
contained 35 individual studies of 5,831 participants. Similarly, a good home environment effected learning with \( d = .57 \), which falls within the Zone of Desired Effects (Hattie, 2009).

It is likely that the effects from socioeconomic resources were more influential during the pre-school and early years of schooling.... The lack of resources, the lower levels of involvement in teaching and schooling, the lesser facilities to realize higher expectations and encouragement, and the lack of knowledge about the language of learning meant that students from lower SES groups started the schooling process behind others. (Hattie, 2009, p. 62)

Research showed that the literacy levels of children were strongly linked to the literacy levels of their parents, and the greatest predictor of a child’s future academic success was the literacy level of their mother (U.S. Department of Education, 2004; U.S. Department of Education, 1992). Children with limited vocabularies struggled in school, and that affected all aspects of reading and writing (Simmons & Kameenui, 1998). This deficit can be cumulative, and it followed that a large vocabulary contributed to academic achievement (Mason & Galloway, 2012). A national longitudinal study that included nearly 4000 students found that if students do not read proficiently by third grade, they are four times more likely to drop out of school than students who were proficient by third grade. Of the third graders who were not proficient in their reading, there was a disproportionate number who experienced poverty – three times more. Third grade is not only the crucial grade for reading, but it is crucial for learning. Students shift from learning how to read in the lower grades to reading to learn in the upper grades (Annie E. Casey Foundation, 2011).

Aikens and Barbarin (2008) noted that children from low SES home environments acquired language skills more slowly, and they exhibited delayed letter recognition and phonological awareness.

Children from low SES families were also at a disadvantage because they tended to score lower on intelligence tests and academic tasks (Bradley & Corwyn, 2002). These children also had difficulties focusing and paying attention, difficulties with problem solving, and not being able to quantify what quality work was (Alloway,
A study of 81,000 students across the United States showed that students not in a Title I program consistently showed higher engagement in school than students who received free/reduced meals, which is an indicator of low SES (Yazzie-Mintz, 2007). These situations contribute to the difficulty a child faces in school, and a child of low SES will often either act out in negative ways or tune out and fall further and further behind (Buschkuehl & Jaeggi, 2010). These actions are the exact opposite of what a child needs to do to close the achievement gap.

Literacy is one of the main indicators to academic success and being ready for a career or college. The lack of literacy skills was often a common trait of people living in poverty. The National Institute for Literacy estimated that 43% of adults with very low literacy skills lived in poverty. About 70% of adult welfare recipients had lower level literacy skill on the National Assessment of the Adult Literacy (Hussar & Bailey, 2011). There was an inverse correlation between reading level and probability of being on welfare. As a person’s reading level increased, the probability of being on welfare decreased, and “it is clear that individuals with more limited literacy skills are less likely to be employed than those who demonstrated more advanced skills” (Kirsch, Jungeblut, Jenkins, & Kolstad, 2002). The acquisition of literacy skills begins in the home during ages birth to four and continues through a child’s schooling.

Data from the National Assessment of Educational Progress suggested that there was a strong correlation between mathematics achievement and SES (Kozol, 1992). Numeracy is the ability to reason and apply basic numerical concepts. This numeric literacy was also affected by the SES of families. Children with higher SES backgrounds were more likely to be proficient on tasks of addition, subtraction, ordinal sequencing, and math word problems than children with lower SES backgrounds (Coley, 2002). One study also stressed the impact of SES and found that poverty adversely affected children’s mathematical test scores more than good teaching instruction (Georges, 2009). This study concluded that policies that tried to address mathematics deficiencies through instruction did not have as great an effect as policies that addressed family SES. Studies also found that already by the kindergarten age, students from low SES backgrounds
were behind their higher SES peers based on numeracy test scores (Fryer & Levitt, 2004). Basic knowledge of mathematics was higher with children from higher SES families. In relation to socioeconomic status and mathematical understanding, Georges (2009) concluded:

Based on their lower test scores at the end of kindergarten, students in poverty started behind and remain behind in the more difficult content areas like adding, subtracting, multiplying, and dividing, at the end of kindergarten. Even with exposure to effective instructional practices, students in poverty seem to take longer to close the gap. Poverty is detrimental to academic progress even before students start kindergarten, and the detriments remain after the positive influence of instruction kicks in. In the face of persistent income inequality, more time using the best teaching practices could be insufficient to reduce the poverty score gaps. (p. 2174-2175)

**SES Factor: Brain Research**

Children from low SES often started their first day of kindergarten at a deficit. Shortcomings in vocabulary, social skills, numeracy, and the navigation of school culture were common deficiencies that children dealt with. The gap between the highest and lowest kindergarteners in reading can be as much as 6 years, and 4 years for math (Fielding, Kerr, & Rosier, 2007). It is important to note that these deficiencies do not measure the capacity to learn. There is research that cited that up to 98% of all students had the academic potential to catch up and be on grade level (Allington, 2011). This supported the fact that the brain continues to develop well beyond the pre-school and elementary ages.

There was an exponential amount of new understanding that we now have about our brains that we never had before. Technologies and science have helped with this understanding and the applications that can be made. With this new knowledge came the correcting of previously held beliefs. One misconception was the belief that the brain is fixed and a finished product as a child neared age 12 (Centre for Educational Research and Innovation, 2007). Imaging technologies showed that the brain continues to make
new connections and grow throughout childhood and into adulthood. There is an emerging field of science called educational neuroscience where we learn that the brain is plastic. The brain is malleable, and it continues to form cellular connections as learning occurs. This new understanding has implications to education, teaching, and learning. Knowing that human brains are adaptable and has plasticity well into adulthood should change the way many people look at education (Hinton, Fischer, & Glennon, 2012). “Perhaps the most important, plasticity research allows us to rethink human potential and ability” (Wilson & Conyers, 2013, p. 29).

There are engrained philosophies and beliefs in the American educational system that abilities and traits are fixed. These philosophies and beliefs have been passed on through generations of families. We see this belief of fixed traits whenever a parent comments that my child is not good in math because I was never good in math. Academic ability is often treated like a genetic trait.

The terms neural plasticity and brain plasticity, which are typically used interchangeably, describe the ability of neurons (cells) in the brain and synapses (the structures that allow neurons to pass information to one another) to change. Our brains create new synapses through a process called synaptogenesis and also eliminate synapses through a process called pruning (Wilson & Conyers, 2013).

Educational neuroscience is discovering new things about the brain’s development. There was a popular belief that very important brain development occurred between ages 0-3. However, there is no current research that showed that this development or lack thereof, can predict the ability to learn in later years. A person’s ability to learn is not dependent upon the number of synapses that are formed between the ages of 0-3 (Bruer, 1999).

**SES Factor: Family Beliefs & Values**

There has been research into the role that family beliefs and values play in the education of children. One such study has found that families living in low SES situations who had authoritarian and inflexible beliefs about education and raising their children had negative effects on a child’s achievement level in reading (Campbell,
Goldstein, Schaefer, & Ramey, 1991). Many family researchers agree that children who are surrounded in an environment that is supportive and nurturing, along with having clear expectations of discipline and guidance, are ideal situations for child development (Mandara, 2006).

Another study of low-income black children from three different areas showed that the attitudes and values of the family had a significantly large negative impact on the achievement of children in both math and reading. Moreover, this impact had long term negative effects on these children (Datcher-Loury, 1989).

Family beliefs about learning play a role in academic success. The way you view new learning challenges has an effect on how much you believe you can learn from it. “When you believe that intelligence is a talent, then you think that you have a particular degree of intelligence that determines how well you think. When you believe that intelligence is a skill, then you assume that anything can be mastered if you work hard enough to get it” (Markman, 2011, para. 6). These beliefs have an impact on how individuals face difficult learning challenges. It can be the difference between believing one have maxed out on their intelligence and consequently quit, or feel a greater sense of purpose, and challenge to persevere.

This result is quite important. A mountain of evidence suggests that intelligence really is a skill. That is, the harder you work, the more you learn. So when you encounter something difficult, it is better to treat that as a challenge than as a sign that you have reached your mental limits. It is also better to believe that studying hard will lead to good learning than to believe that studying hard leads to poor learning. By putting in extra effort on difficult concepts, you come away with more knowledge. (Markman, 2011, para. 11)

Resiliency Theory

Resilience theory focuses on children who have lived through extremely high-stress situations during their developmental years, and it focuses on how they have overcome those situations to lead successful adult lives. Examples of some of these high-stress situations include alcoholism, abuse, poverty, and war.
In 1955, a 40 year longitudinal study of children born into high risk situations (i.e. illness, family poverty, parental discord, and parental medical or mental problems) was undertaken (Werner & Smith, 1992). About two thirds of these children did not fare well and did not overcome their life situations. This failure to overcome negative life situations led to things like early pregnancies, delinquency records, learning problems, and behavior troubles. The other third grew up to be “successful adults who are living nurturant, responsible, achievement-oriented lives” (Sylwester, 1995, p. 137).

These resilient children had what Werner & Smith (1992) termed protective factors or buffers. These protective factors included:

- At least average intelligence,
- Healthy, active, sociable children,
- Curious and interacted physically with their environment, like having hobbies shared with friends,
- Having both family and non-family members who provided unconditional love,
- Assigned responsibilities in the home environment that was reasonably well-structured, and a
- Development of a positive self-concept and internal locus of control.

According to Child Trends and Center for Child Health Research (2004), 27% of kindergarteners living in poverty deal with a parent at risk for depression compared with 14% of other students. Longitudinal studies of people going through highly volatile situations are finding that as many as 50-70% of children overcome these negative life experiences to develop and lead successful adult lives (Benard, 2012).

When children have a sense of purpose for their future, they have a higher probability of overcoming their hardships. Resilient children had healthy expectancies, goal-directedness, success orientation, achievement motivation, educational aspirations, persistence, hopefulness, hardiness, belief in a bright future, a sense of anticipation, a sense of a compelling future, and a sense of coherence (Benard, 1991).

High parental expectations of their children made the difference between success and failure in school when it came to children living in poverty. Research into resilient children consistently showed that those children with parents who have high expectations
of them increased their chances of being successful in school and later in life (Williams & Kornblum, 1985).

Another trait found in resilient children was personal self-worth and a sense of belonging. “When children are given responsibilities, the message is clearly communicated that they are worthy and capable of being contributing members of the family” (Benard, 1991, p. 7). Children who contributed to the family through things like financial support with a job, chores around the house, or taking care of their siblings were more likely to overcome any setbacks in life (Werner & Smith, 1989). Children felt that they were worthy, and it encouraged independence in children (Clair & Genest, 1987).

Theories of human development and biological research have shown that humans all have the innate capacity to survive and be resilient. Resiliency is part of our genetic make up that naturally develops given the right environmental circumstances. Some of the traits of resilient survivors included:

- Social competence (responsiveness, cultural flexibility, empathy, caring, communication skills, and a sense of humor); problem-solving (planning, help-seeking, critical and creative thinking); autonomy (sense of identity, self-efficacy, self-awareness, task-mastery, and adaptive distancing from negative messages and conditions); and a sense of purpose and belief in a bright future (goal direction, educational aspirations, optimism, faith, and spiritual connectedness). (Benard, 2012, para. 2)

It follows that resiliency is not a human trait that a few special people have. Resiliency is an innate ability that we all have to self-correct hardships that we face for transformation and change (Lifton, 1999; Werner & Smith, 1989). What this validates is the Mindset Theory and other research (Bransford et al., 2000; Centre for Educational Research and Innovation, 2007; Hinton et al., 2012) that noted that learning is not fixed, and as a result, the brain continues to develop well beyond the school years. The research on a Growth Mindset notes that hard work and perseverance increases the learning and motivation (Dweck, 2006). In turn, the ability to adapt to hardships and persevere through traumatic situations is possible even for children who do not inherently have all of the characteristics of a resilient child, and it is also possible to develop those traits.
CHAPTER 3
Methodology

Introduction

This chapter will start with a review, and it will then move into a description of the theoretical lens through which this study was viewed. Justifications will then be presented to explain why this is a qualitative case study research. Finally, specific details of the study will be presented to provide insight and understanding.

Review of the Purpose and Research Questions

The purpose of this qualitative study was to focus on low SES families to find out what strategies and beliefs contributed to their child(ren)'s academic success. The questions being researched are:

1. What qualities outside of the school environment of low SES students impact success in school?
2. What beliefs in the home environment of low SES students impact success in school?
3. How do Mindset Theory and Resilience Theory relate to the success of students of low SES?

Theoretical Construct

The lens through which this research was viewed was through the Implicit Theories of Intelligence. People may not be conscious of the way they view intelligence and learning, making it more implicitly known. They are not usually conscious about their view of how intelligence is formed whether it is static or evolving (Dweck, Hong, & Chiu, 1993). Specifically within the theories of intelligence, are Entity Theory and Incremental Theory (Dweck, 1996). Entity theory is defined as the belief that intelligence is fixed, and no matter how hard a person works, intelligence is unchangeable. On the other hand, Incremental Theory asserts that intelligence and learning are not fixed, but it is malleable and affected by effort and learning (Dweck &
Elliott, 1983). Dweck (2006) continued her research into motivation and learning to focus on mindset. Similar to her early research, Dweck searched for the reasons why some students were so motivated to prove their ability levels, and others simply did not worry about proving anything and focused on learning. The research showed that there were two mindsets – a “fixed ability” that is set and needs to be proven, and an “unfixed ability” that can be developed through learning. The mindset that was set was termed as a Fixed Mindset. The mindset that was evolving was termed as a Growth Mindset (See Figure 3.1).

Applying mindsets to SES can explain many factors that affect the probability of a child’s success in school. In a fixed mindset, where parents and children believe that their intelligence is set, numerous counter-productive beliefs can surface: Poor kids are stupid. No one in our family was ever successful in school. I was never good in school so that is why my kids do not like school. Why try if I am not going to graduate anyway. The list can go on. On the contrary, parents and children who believe that their intelligence can be changed with a growth mindset have productive beliefs that are conducive to academic success: You did not do well this time, let us work harder next time to do better. We do not have all the resources like other families so we need to work that much harder. I was never good in school but if you work hard, you can be better than me. These mindsets turn into strategies and actions that can play a large part in not only the academic success of a child, but future success as an adult.
Figure 3.1 - Growth vs. Fixed Mindsets

Research Paradigm

The following definition of a qualitative research and subsequent details of the study correlated directly to show that this was a qualitative research study. Plano Clark & Creswell (2010) described the qualities of a qualitative research by noting that there is "a problem that calls for an exploration" (p. 66). There were many studies that show that a student's SES positively correlates to academic success. The problem being considered in this study focused on a school where this positive correlation does not apply, and this
study sought to explore and learn more about the atypical effects of SES on learning. More specifically, this study focused on factors outside of the school (e.g., home and community) that played a role in the lives of academically successful low SES students. A qualitative study also "asks broad, general questions" (Plano Clark & Creswell, 2010, p. 66) to allow the researcher(s) to seek deeper understandings and describe a phenomenon in greater detail. This study asks just three general questions related to the home environment. The two main research questions dealt with the strategies and beliefs of low SES families, and they were general enough to elicit a multitude of possible answers. The third question in the study considered a couple of theories that explained the phenomenon of academically successful students living in low SES conditions. Another important quality of a qualitative study focused on the data collected and its analysis. The "data collected consists largely of words (or text) from participants" (Plano Clark & Creswell, 2010, p. 66).

Data collected were typically analyzed inductively; that is, qualitative researchers do not tend to develop hypotheses first and then test them. Instead, it is more common for the researchers to begin organizing and analyzing the data while they are being collected. Through the exploration of the data, patterns and interrelationships began to become apparent. The preliminary relationships can be checked and refined through further data collection. ( Heck, 2004, p. 216-217)

All the data in this study consisted of transcribed notes from parent/teacher questionnaires and parent interviews. The study does not start off trying to collect data to prove a hypothesis. Rather, the interview data were collected and analyzed simultaneously to look for patterns and correlations between the research participants. The data and the patterns that emerged were used to gain an understanding of the phenomena of academically successful low SES students. The initial transcribed data were also used to inform the creation of follow up questions for greater understanding.

Finally, a qualitative researcher "conducts the inquiry in a subjective and reflexive manner" (Plano Clark & Creswell, 2010, p. 66). This study has a subjective approach as the lens through which this study was viewed is the same as the researcher and shaped the interpretation of the data. However, to address this subjectivity, reflexivity of the
researcher to convey their background and its impact on the interpretation of the data will be disclosed (Creswell, 2013) through a process called bracketing. The "researcher reflects on his or her own views and experiences related to the study's central phenomenon, describes these perspectives in writing, and then works to set them aside (or "bracket" them) during the analysis process" (Plano Clark & Creswell, 2010, p. 287).

Qualitative research generally can take on various designs (e.g., Narrative, Phenomenological, Ethnographic, Grounded Theory, Case Study). These designs have "emerged from different disciplines to address different research purposes" (Plano Clark & Creswell, 2010, p. 236). This descriptive study utilized a single case study design. This design "relies on the views of participants to provide an in-depth exploration of a case in order to better understand a research problem" (Plano Clark & Creswell, 2010, p. 242). The research focused on a school community in a low SES housing development and sought to gain a greater understanding of families facing obstacles identified in research related to poverty, yet whose students are successful students in school. In order to better understand a specific school community, multiple families will be included, forming the units with the case study.

Each family comes from the adjacent low-income housing development and therefore is bounded by physical boundaries. Multiple forms of data were collected, including parent interview, demographic and school-wide data, and open-ended questionnaires of both parents and all of the teachers in the school in order to triangulate the results and search for patterns in low SES families that affect academic success. (Plano Clark & Creswell, 2010).

Descriptive case studies are most appropriately used to answer "How" and "Why" questions, but can also be sufficiently effective to answer "What" types of explanatory questions (Yin, 2003). The two main questions in this study are "What" questions. Case studies are also used to explore the causes of phenomena and to look more deeply at principles of a theory to validate it or not (Shepard & Greene, 2002; Yin, 2009). Yin (1994) defines a case study as an inquiry into contemporary occurrences that we observe and can be studied in its specific real life context. This research attempted to develop a
better understanding of the home environment of children living in a low-income setting by interviewing their parents and teachers.

Single case studies are used as independent studies to investigate a population or general condition (Denzin & Lincoln, 2003). This descriptive single case study sought to explore and describe the behaviors and beliefs of families and their effect on learning. This was evident through the focus of this study and its first two research questions: 1) What qualities outside of the school environment of low SES students impact success in school? 2) What beliefs in the home environment of low SES students impact success in school?

The names of the school, its parents and students, and the nearby housing development have been changed to preserve the anonymity of the school community.

The Diamond Head Elementary School community was chosen to be studied because of its low SES population (i.e., 85% free/reduced lunch rate) and academic success as noted in Figure 3.2 below. This phenomenon of school growth is not common in the field of education, and more often than not, schools that serve low SES communities are failing schools. Constant increases in scores since 2002 have spurred an interest in understanding some of the causes for this growth. In 2002, 11% of the students at Diamond Head Elementary School were proficient in reading, and 1% was proficient in mathematics. A decade earlier, children and families coming from this low SES community, generally, did not experience academic success.

Figure 3.2 - Diamond Head Elementary Hawai‘i State Assessment Scores
For 11 years, there has been a steady increase in scores, changes in attitudes, and changes in beliefs about learning. School scores have increased to 79% of the students being proficient in reading and 78% being proficient in mathematics in 2013.

Description of the Project

The Diamond Head Affordable Housing Development is on the island of O'ahu in the state of Hawai'i. It consists of 83 buildings with an average of six units in each building. There are a total of 424 housing units. Approximately 76% of the school population (243 students) come from the housing and attend Diamond Head Elementary School (DHES). DHES has about 320 students. Eighty-five percent of DHES students participated in the Federal Free/Reduced Lunch Program and are therefore considered at-risk (Accountability Resource Center Hawaii, 2012).

Diamond Head Elementary School has a high English Language Learner (ELL) population that averages around 35% of its student population (Accountability Resource Center Hawaii, 2012). The school utilizes an inclusion model for helping its ELL where extra resources like highly qualified teachers and part-time teachers go into the classroom to support the ELL students. The majority of this personnel support goes into the classroom during the English Language Arts time. There are times when ELL students who are really struggling or non-English proficient are pulled out for extra tutoring, and that is based on the availability of personnel. However, the majority of ELL support goes into the classrooms where ELL students are learning alongside their peers.

In Hawai'i, students are graded quarterly, and they receive one of five marks for each subject area. Grade marks for Hawai'i State Report Cards are listed below:

- Not Applicable at this time (NA)
- Well Below (WB)
- Developing Proficiency (DP)
- Meets with Proficiency (MP)
- Meets with Excellence (ME)

In addition to their report card grades, the Hawai'i Department of Education strives for all its students to be proficient in reading and mathematics (Hawaii State DOE,
Meeting proficiency on the Hawai‘i State Assessment means getting a score of 300 points or more on either the reading or math test.

**Traditional Definition of Academic Success**

The most traditional way to define academic success is to look at student test scores and grades. In Hawai‘i, students are considered academically successful with scores of 300 points or more on each of their reading and math Hawai‘i State Assessments. 300+ points means that they are proficient in the specific area of testing.

When considering grades, traditionally successful student report cards have grades of only MP’s and ME’s in the areas of reading and math (See Table 3.1).

<table>
<thead>
<tr>
<th>Traditional Definition</th>
<th>Non-Traditional Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Card Grades for Reading/Math</td>
<td>MP’s and/or ME’s for the year grade</td>
</tr>
<tr>
<td>State Test Scores</td>
<td>State Test Scores</td>
</tr>
<tr>
<td>300+ for Math and Reading</td>
<td>Gains higher than the average 11 points in Reading &amp; 17 points in Math</td>
</tr>
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</table>

**Non-Traditional Definition of Academic Success**

In a non-traditional sense, growth and improvement is considered when describing a student who is academically successful. *Gains* in state test scores are considered for this definition of academic success. Average gains between tests for the Hawai‘i State Assessment at Diamond Head Elementary School during school year 2013-2014 are 11 points for Reading and 17 points for Math. Students whose gains are higher than those scores were considered for this study, as noted in Table 3.1 above.

The gains in this sense also meant that their last score would be below 300 points. This criterion is put in place because the study is also seeking non-traditional successful students, and any student scoring above 300 points is considered in the traditional definition of academic success. Additionally, students will *not* have to ultimately end up
with grades of MP's and ME's in reading and math for that same reason. Therefore, grades are not a factor in looking for the non-traditional academically successful students.

The rationale for adding this non-traditional definition to academic success is that there are many students who work hard to improve. Many students work hard in class, stay after school to get the extra help, and complete all their homework in an effort to improve. And in doing so, their state test scores may improve dramatically, but they might just miss the 300 point proficiency cut off. This drive to improve and effort to make a change in their learning is ultimately what this study is trying to understand. This study seeks to understand what beliefs and qualities of families of low socioeconomic status promote student success in school.

**Research Participants**

Families were chosen purposefully using a criterion-based selection method. The school site was purposely selected for its low SES population and high achievement data to gain understanding into the phenomena of student academic success (Plano Clark & Creswell, 2010). Families for the study were chosen based on criteria that ideally provided data that were “information rich” (Patton, 2002, p. 230).

A list of all families with children who attended Diamond Head Elementary School and lived in the adjacent housing project was generated. Choosing families from the housing development assured that the families were of low SES. The list of families was then narrowed by eliminating anyone not having the following three criteria: 1) 300+ score on both their Math and Reading Hawai‘i State Assessment, 2) only ME’s and MP’s on their last school report card, and 3) 11+ and 17+ point gains on their Reading or Math Hawai‘i State Assessment respectively. Going through this process produced a list of students who were considered academically successful for this study.

Ten families of students who met the criteria above were chosen to be a part of this study. Attempts were made to create a robust sample of successful students (e.g., gender, age, cultural background, traditional success, non-traditional success).

Ten teachers from Diamond Head Elementary School were given an opportunity to participate in an anonymous online questionnaire, and all the teachers completed it.
The focus of the questionnaire was about general student success of children from low SES backgrounds. The data collected from the teachers were used to shed light into how the school and community viewed student success. The data were used to gain a deeper understanding of how students from low SES backgrounds are overcoming their challenges to be successful in school.

Instrumentation

This research utilized parent interviews and parent/teacher questionnaires. In-depth parent interviews were the main source of data collection. The student academic data and teacher questionnaires were used to triangulate the data and increase credibility.

Parent interviews. Questions were based on prior research from the literature review. Questions were categorized into five topics based on the literature review.

Demographic Questions:

1. How many years have you lived in the Diamond Head Housing?
   a) 1-3 years   b) 4-6 years   c) 7-10 years   d) 10+ years
2. Marital Status?
   a) Married   b) Never Married or Single   c) Divorced or Separated
   d) Unmarried Partners or Domestic Partnership
3. What is the highest level of education completed?
   a) GED   b) High School Diploma   c) Trade School Diploma
   d) Community College Degree   e) College Degree   f) Other

Home Environment:

1. How many adults live in the home? How many children live in the home?
2. What things do you have in the home that is related to education or helps with learning? (e.g., books, toys, electronics)
3. On a typical afternoon after school, what does _____ do? What other things does _____ do after school?
4. Describe a typical evening at home. What other things does your family do in the evening?
5. Does your family do anything on the weekend that's related to school or learning? Explain.

6. What economic challenges affected _____'s learning? How did you address them?

**Parental Involvement:**
1. Are you working right now? How many jobs? What are your working hours?
2. What are your views on school attendance? How do you think attendance affects learning?
3. What time do you get to spend with your children during the week? How do you spend that time?
4. What time do you get to spend with your children during the weekend? How do you spend that time?
5. Describe a typical evening at home and your interactions with ______? What other types of interactions do you have with ______?

**Cognitive Development:**
1. When do you think a child begins learning? What are things you did to help with that learning?
2. Did _____ go to preschool? How many years (if applicable)? Why or why not?
3. When did _____ begin to recognize letters? How did you help with that?
4. When did _____ begin to recognize numbers? How did you help with that?
5. When did _____ begin reading? How did you help with that?
6. How often did you talk to _____ as an infant? Toddler?
7. Were there other family members/friends who helped with _____'s learning? If applicable, how did they help?

**Family Beliefs & Values:**
1. What do you believe about education?
2. How has _____ been doing academically in school?
3. With regard to education, what would you like for your child in the future?
4. When your child does well or accomplishes something, what do you do? When your child does not do something well, what do you do?
5. When your child fails at something or faces adversity, how do they handle it? What do you do?

6. How do you believe your SES affects _____’s learning? How do you address it?

Parents in the study were offered an opportunity to review the transcripts to add or take out anything that was collected. All parents declined the offer. These things were done simultaneously with the analysis. “In qualitative research, the data collection and analysis (and perhaps the report writing) are simultaneous activities” (Plano Clark & Creswell, 2010, p. 278).

**Teacher questionnaire.** Ten teachers completed the questionnaire. The teacher questionnaire was used to gain different insights and perspectives into the two main research questions: What beliefs in the home environment of low SES students promote success in school? And What qualities in the home environment of low SES students promote success in school? The questionnaire consisted of three open-ended questions:

1. Consider the most successful student that you’ve had in the past that has come from the Diamond Head Housing Community. In what ways do you consider them a success? Explain.

2. What qualities or beliefs did this student possess that makes you consider them successful? Explain.

3. What qualities or beliefs of this student’s home environment helped with this success? Explain.

The first question sought to define success from the teacher’s perspective. The second question considered the success of the student in school. Finally, the third question determined the impact that the home environment played on success.

**Parent follow-up questionnaire.** After the data were gathered and analyzed from the initial interviews, a follow-up questionnaire was mailed out to parents to complete. Five more questions were asked to delve deeper into parent perceptions. The first two questions considered parent’s perceptions of their child’s success. The last three questions had to do with parent perceptions of the school.

The following questions were asked:

1. Why do you think your child is successful?
2. What qualities do they have that make them successful?
3. What do you want your child to get out of school besides academics?
4. What is your perception of Diamond Head Elementary School?
5. What's going on at Diamond Head Elementary School that has helped them to be successful?

**Procedures for Collecting Data**

Student academic data that were used in this study were data that the Hawai‘i Department of Education normally collects. Hawai‘i State Assessment data were retrieved through the DOE testing database (Longitudinal Data System - LDS) and grades were collected through the DOE’s attendance/grades database (electronic Student Information System - eSIS). These data were used to determine which students were academically successful, and which families met the criteria of this study.

It was a stipulation of the Hawai‘i DOE’s approval of the study that a school liaison be appointed to handle much of the school data. As the researcher, I was not permitted to do so. A curriculum coordinator at DHES served as a Hawai‘i DOE Liaison who collected the testing and grade information for the study. This liaison helped with disaggregating the data to determine who qualified for this study. The liaison also helped by mailing out student assent and parent consent forms to determine the 10 families for this study.

Utilizing the pool of qualified students, families were contacted by mail to request their participation in the study. This process continued until 10 families agreed to participate in the study. After consent forms were signed and received, parents were contacted and appointment dates, times, and locations were set to carry out the parent interviews.

Teacher questionnaires were posted online and given to teachers to complete anonymously on their own time. Although the researcher knew who the participants were, the answers to the open-ended questions were completely anonymous.
Considerations for Human Subjects

This study involved human interaction with participants above the age of 18. The study involved mainly parents of elementary age children. An explanation of the project, its purpose, confidentiality matters, and permission to participate was shared prior to proceeding with any participation in the study. Personal identification of all parent participants was protected, and the reporting of all data and findings was anonymous.

Another role group in this study was elementary school teachers. Ten teachers were asked to participate in the study, and an explanation of the project, its purpose, confidentiality matters, and permission to participate was shared prior to proceeding with any participation in the study. The identity of the teachers who have been chosen to be a part of the study was protected, and questionnaires were completed electronically and anonymously.

Procedures for Treating, Coding, and Analyzing Data

The data from the interviews were first transcribed and then analyzed. A content analysis was performed with responses to each question from the parents organized into themes. As the process ensued, patterns of similarities and outliers were noted. Patterns of non-examples were also noted. For example, it would be important if no family engaged in a particular activity or if no family had similarities. The next level of parent interview analysis considered the meaning of the responses provided. The quality of the response and how parent answers directly addressed the interview questions determined whether their answers would be used as anecdotal data.

The responses to the parent and teacher questionnaires were transcribed, catalogued, and analyzed in the same manner.

Student academic data (e.g., grades and test scores) were gathered and analyzed. The data were analyzed to come up with a list of potential family participants for this study who matched the definition of a successful low SES student. This secondary source of data helped with triangulation and greater credibility.
Limitations

The sampling of parents was a limitation. Once a purposive sample representing the parameters of the study was identified, potential participants were contacted by mail, with the request written in English. Due to a large number of limited English proficiency of the sample, it is possible that a number of parents were unable to fully comprehend the nature of the request. The parents who ultimately did agree to participate were relatively proficient in English with only two having serious translation issues during the interview.

Another sampling problem was that Micronesian families were underrepresented. While the school population of Micronesian students is 49%, and multiple Micronesian families were identified and approached to be in the study, only one family participated.

An additional factor that could be both a limitation and an advantage was the role of the researcher, who was also the principal of the school. An advantage could be the willingness of parents and teachers to participate due to their familiarity and trust in the researcher. It could also be a limitation if both groups felt compelled to participate or answer questions in a particular manner.

Finally, a limitation could be that student data used in the study spanned only one year’s time and were not longitudinal.
CHAPTER 4

Results

Overview of Study

This study considered the impact of the environment outside of the school day on academic success, and it focused on low SES students who have shown academic success in school. The following questions guided the study:

1. What qualities outside of the school environment of low SES students impact success in school?
2. What beliefs in the home environment of low SES students impact success in school?
3. How do Mindset Theory and Resilience Theory relate to the success of students of low SES?

All 10 parents that were interviewed lived in the adjacent low-income housing development. Of the 10 parents who participated in this study, eight were mothers and two were fathers. Eight were parents of students who were academically successful in the traditional sense. Their children scored at the proficiency level or higher in language arts and mathematics in both classroom grades and state standardized tests. The remaining two were parents of students who were academically successful in the non-traditional sense. These two students had the highest increase in standardized test scores in the school, but did not meet proficiency on their language arts and mathematics. All students' performance measures were from school year 2012-2013.

Parent & Interview Descriptions

The names of the students and parent interview participants have been changed to preserve their anonymity.

Parent A. Amelia is one of the eight mothers interviewed, and she is of Filipino ancestry. She moved to Hawaii when her son, Andres, was six years old back in 2009. She spoke with an accent but was articulate enough for me to understand her responses with minimal interruption or need for clarification on my part. She chose to come to the school in the afternoon at 4:00 to be interviewed, and the interview was held in the
school’s office. Amelia came dressed in her work clothes and intended to go to work at
the conclusion of the interview. She works in the evening at a local fast food restaurant
and works six days a week, Monday through Saturday. Amelia graduated from a
community college.

Amelia is married and their son, Andres, is the oldest and only child in their immediate family. They live in a crowded living situation. In their home, Amelia stated that they are living with 15 adults and two children. They have been living in the low-income housing development for five years.

The language spoken at home is a mix of English and Filipino, and therefore, Andres is considered as an English Language Learner by the school. Andres is one of the two students who made the greatest gains in the Hawai‘i State Assessment results at Diamond Head Elementary School (DHES) for both reading and math. He is considered successful in the non-traditional sense because of the gains that he made and yet, not reaching the proficiency cut off score. Average gains at DHES for reading and mathematics is 11% and 17% respectively. Andres improved his reading score by 15% and his mathematics score by 25%. He is currently in the fifth grade.

**Parent B.** Barbara is another one of the parents whose child was identified to be a part of the study because he is successful in the non-traditional sense. She agreed to be interviewed and decided to meet late one afternoon after work at 5:15. She asked to be interviewed at the nearby park and came dressed in her work clothes. Barbara works during the day and works five days a week, Monday through Friday at a local convenience drug store. She completed trade school.

The interview took place in a quiet room in the park’s recreation center. Barbara knew a park employee and asked if he could get a room open for us. The park employee opened a room for us, and seemed happy to do it because he knew her son Brian. The interview went smoothly as Barbara was very articulate.

Barbara is married and her son, Brian, is a mix of Hawaiian and Hispanic ancestry. Their household consists of two adults and three children. The family has been living in the Diamond Head Housing Development for eleven years. Brian is the middle child with an older sister in high school and a younger brother in elementary school. His
younger brother attends DHES, and his older sister attends the high school in the same complex.

Brian is considered successful in the non-traditional sense. Brian did not make proficiency, but made one of the largest Hawai‘i State Assessment score gains at Diamond Head Elementary School for reading and mathematics. He increased his score in reading by 17% and increased his mathematics score by 25% in one school year. Brian is currently a sixth grader at the feeder middle school to DHES. English is the main language spoken at home and therefore, Brian is not considered as learning English as his second language.

**Parent C.** Claire is a parent whose son, Connor, is considered to be successful in the traditional sense. Their family is Vietnamese, and they are proud of their culture as evidenced by sending their two older boys to Vietnamese language school and speaking to their children mostly in Vietnamese as they grew up. Claire is bilingual and in our interview had a fairly good grasp of English. There were a number of occasions where I either needed clarification for her answer, or I needed to rephrase my question in a simpler manner. However, in either case, both she and I quickly gained understanding after initial rephrasing. Claire does not have a job, but chooses to stay at home to raise her two boys. She was able to complete community college.

There are three adults in the household and three children. Claire just recently gave birth to a baby boy, and besides the three boys and their parents, Claire’s mother also lives with them. Her mother helps with household duties and taking care of the children in the family. The family moved from Vietnam to Hawai‘i in 2000, and their family has lived in the Diamond Head Housing Development for 13 years.

The newest baby in the family is less than a year old. Her middle son is currently in the fifth grade at DHES. Connor, who was considered for this study, is currently a sixth grader at the nearby middle school. Since both English and Vietnamese are spoken at home, their two sons are considered as ELL students at their respective schools.

Claire asked to meet on a Saturday morning at DHES. Coincidentally, during the interview, Claire brought up the fact that she is good friends with Diana who also received a letter of invitation to interview and that their two sons grew up together. She
went on to share that Diana was hesitant to respond because her English was not that
good. Claire asked if she could be the interpreter for Diana who is also Vietnamese. I
agreed. Claire ended up calling Diana who also came by to the school that Saturday. We
ended up having two interviews on that same day. Claire and Diana shared that both
their sons were childhood friends who spent a lot of time together since they were babies.
Conner and Dylan would often help each other learn by playing games and doing their
homework together.

**Parent D.** Diana is the mother of two boys and their household consists of Diana,
her husband, and their two children. Diana and her family first came to Hawai‘i in 1999,
about the same time that Claire and her family moved here. They have been living in the
low-income housing development for nine years. Diana was unable to finish middle
school but has a full time job at a local nail salon where she works Monday through
Friday.

Her son, Dylan, who was considered for this study is currently a sixth grader
attending the nearby middle school, and her youngest son is a fourth grader at DHES.
Both boys are considered English Language Learners because Vietnamese is spoken in
the home.

Diana had a difficult time with understanding English but was able to understand
some words. She tried to make sense of the questions that were asked, but we utilized
Claire as our interpreter for both my questions and Diana’s answers. I was unaware of
this family connection between Claire and Diana, and it was an extremely helpful
coincidence to me as the researcher. Without Claire as our interpreter, I do not believe
we could have completed the interview. Diana would not have been able to understand
practically all of the questions that were asked due to the language barrier. Thanks to
Claire, Diana came on that same Saturday morning and we completed the interview
together.

**Parent E.** Ethan is the father of Eric, one of the students who are successful in
the traditional sense. Ethan asked to meet at the school, so we had our interview after
school in the office. He is married and he and his wife have one son. They are
Vietnamese, and both English and Vietnamese are spoken in the home. Eric is
considered as an ELL student at the school. Their family has been living in the housing development for 11 years. Ethan works from the late afternoon to early morning hours, six days a week, Monday through Saturday as a van driver for food delivery business.

In Vietnam, Ethan went to medical school to pursue a medical career that is one level above a nurse and one level below a doctor, something akin to what we call a nurse practitioner in the United States. He finished a four year college in medicine. He spoke extensively about his lack of English speaking ability and how that has led to him having a job where you have to use your “body” instead of your mind.

This interview was quite a challenge to make sure things did not get lost in translation. There were a number of times that I needed to ask him to repeat his answer. I also needed to rephrase or give definitions to words that Ethan was unsure of. For example, when asked about his belief in education, he gave the following response, “I believe that every people, if don’t have education, look like they don’t know anything. I can say people smart, but not study, they not smart more. I believe that is education…. Low people, low education work have to do body work. Have to work hard, but not too much money. That’s what I believe education. If have time, have to study more.”

His son Eric is considered successful in the traditional sense, and is currently in the fourth grade at DHES. I would say that Eric is the most “latchkey child” out of the ten children in this study. When I do home visits in the housing development in the afternoon, I often see Eric playing around the neighborhood. I also see him walking around on the streets when I drive home or sometimes playing with friends at the school on the weekend. When I asked what Eric does during most afternoons, Ethan shared that Eric played and then came home at 8:00 at night to start his homework.

Parent F. Francine was the parent of Faith, a student who is considered as a successful student in the traditional sense. Their family is from Micronesia (Chuuk) and they speak mostly Chuukese in the home with some English. Faith is considered as an English Language Learner in the school. Francine is married and has three children. Their family first came to Hawai‘i in 2006. She completed the eleventh grade in school. She has one job and works Monday through Friday from 8am-3pm for a
maid/housecleaning business. Their family has been living in the housing development for the past seven years.

Francine asked to meet at the school and came in the early evening after work one day. The interview took place in the office and she spoke fairly good English. Her English was not especially articulate, but she was able to answer nearly all of the questions. For example, when asked about her beliefs about education, she said, “I believe in education. It’s very important. But I don’t know why.”

Faith is currently a sixth grader at the nearby middle school and has a brother in the eighth grade attending the same school. She also has a younger brother in the fourth grade who attends DHES.

**Parent G.** George is the father of a successful student, Gloria, who was identified for this study in the traditional sense. George is currently unemployed and has been living in the Diamond Head Housing Development for five years. He has a high school diploma and is married with three other children living in their household. They are of Hawaiian ancestry and speak English in the home. Gloria is not considered as an ELL student. She has a twin brother, and they both are in the sixth grade at the middle school. Their older brother recently graduated from high school.

George asked to meet at the school, so a meeting was set up after school in the office for the interview. This was the only meeting where the student sat in on the interview. This did not seem to affect the interview in any way. Gloria did not contribute much to the interview except to validate comments that her father made during the interview. This interview went smoothly. There were no issues with communication or translation.

**Parent H and I.** Parent H and Parent I was the same person. Heather is the parent of two students, Hunter and Hailey, who are considered successful in the traditional sense. Heather is currently unemployed and has lived in the housing development for nine years. Eight of the nine years in the housing was spent with her husband and family. Heather was recently divorced and is a single mother of six children. She went to college for one year, but was unable to finish. She is of
Guamanian ancestry and English is spoken in the home. None of her children are considered an ELL student by the school.

Heather’s two oldest children were the ones who were identified for this study. Hailey is the oldest child and is a sixth grader at the nearby middle school. Hunter is the next child in the family and is a fifth grader at DHES. Heather also has three daughters at DHES who are in kindergarten, second, and third grade. Her youngest daughter is a toddler.

The interviews with Heather were done separately and were treated as such. Although her children were brother and sister, for the purposes of the study, they were considered independently of one another. These interviews were an opportunity to see if there were also differences in childrearing within the same home among children of different gender. She asked to have the interviews at the school, so we were able to meet one afternoon in the school’s science lab. Her school-aged children were not present at the interview, but her toddler daughter did come and was able to play on the carpet in the science lab with minimal disruption to the interview. Heather was very articulate, and there were no issues with communication or translation.

Parent J. Jean is the parent of Jessica, a student considered to be successful in the traditional sense. She is married with three children. Jean has lived in the Diamond Head Housing Development for a total of 22 years over the course of her life. She grew up in the housing development, left for Washington state to raise her family, and has since returned and lived in the housing development for the past two years. Jean has one job and feels so strongly about spending time with her children that she makes sacrifices through her choice of work hours. She works Monday through Friday from two to 10 in the morning for an international mail carrier service. She noted that it is really challenging because she does not see them in the morning, but she purposely chose her schedule so that she can be there for her children in the afternoons, evenings, and weekends. Jean completed one year of college and was unable to finish. Their family is of Hawaiian ancestry and English is spoken in the home.

We met after school one day to do the interview. There were no issues with communication or translation. Jean is very articulate. Her daughter Jessica was chosen
for this study for performing well in school, and she is currently a sixth grader in the middle school. Jessica has an older brother in the eighth grade in the same middle school and a younger brother in the third grade at DHES and a baby brother.

**Parent and Student Study Participants**

Based upon what the researcher knew about the families who participated in the study, the following patterns emerged.

**Ethnicities.** There was an uneven representation of student ethnicities when it came to the successful students in this study. In recent years, nearly half (47.5%) of the student population at DHES is Micronesian. When considering successful students for this study, there were multiple successful Micronesian students available for the study; but only one Micronesian family responded. Micronesian students, the newest immigrant population to the Hawaiian Islands, were underrepresented in the academically successful student population group.

**English Language Learners (ELL).** There was a higher than average representation of the students in this study when compared to the ELL population at DHES. DHES has had approximately 32.5% of its students learning English as their second language, and in this study, half of its participants were considered as ELL students. Closing the learning gap between students at risk (e.g., SpEd, ELL, Free-Reduced Lunch Program) and students who are not at risk is a goal for the Hawai‘i Department of Education.

**Birth order.** Birth order was considered because I noticed that were more than a couple of students in this study who were the oldest. I then wondered how many of the students were actually the oldest and only children. There did not seem to be any glaring statistic that jumped out except for the fact that there were no children in this study who was the youngest in the family. They were all either the oldest, only, or middle child. That was interesting because there are many studies on the effects of birth order on achievement and personality. Firstborns typically do better in school, attend college, and score higher on standardized tests. It is theorized that the attention and focus given to the firstborn before any additional child in the family, sets the foundation and trajectory for
the future. Being the oldest also promotes leadership tendencies in family dynamics (Cherry, 1990). In this study, three out of the 10 students were the oldest child, two were the only child in the family, and the remaining five students were middle children. None of the students represented in this study were the youngest child.

Gender. Differences in gender did not significantly standout when it came to successful students in this study. There were six boys and four girls, and when you disaggregate the two boys who were considered academically successful in the non-traditional sense, there was equal representation amongst the traditionally successful students.

Parent Interview Results

Based on the literature review, parent interview questions were sorted into five categories: Family Demographics, Home Environment, Parental Involvement, Cognitive Development, and Family Beliefs and Values.

Family demographics. Three questions were asked of parents to gain general insight into individual family situations:

1. How many years have you lived in the Diamond Head Housing?
2. What is your marital status?
3. What is the highest level of education completed?

Of the 10 families interviewed, nine of them have lived over five years in the housing and have children who are doing well in school. One family just moved into the housing development and has been living there for two years.

Eight of the parents interviewed are married, and with regard to their schooling, one parent did not complete middle school. The other eight parents have at least a high school diploma. Of the eight parents who have their high school diploma, three have community college or trade school degrees and one parent has a university degree from another country.

Home environment. To gain further insight into life in the home, the following questions were posed:

1. How many adults live in the home? How many children live in the home?
2. What things do you have in the home that is related to education or helps with learning? (e.g., books, toys, electronics)

3. On a typical afternoon after school, what does ____ do? What other things does ____ do after school?

4. Describe a typical evening at home. What other things does your family do in the evening?

5. Does your family do anything on the weekend that’s related to school or learning? Explain.

6. What economic challenges affected ____’s learning? How did you address them?

**Household size.** Most homes of the families in the study had one to two adults plus two to three children living in the household. Amelia and Andres’ home had 15 adults and two children. Heather, whose two children were in this study, also had her four other children in the home. Navigating school work, personal space, and family dynamics becomes much more challenging when having to live in two room apartments with a large family. The families in the study tried to create safe environments at home. They talked about various things like having dinner together, talking together about the day, doing homework, watching movies/TV together, and family Bible study time. Amelia shared that they often would just hang out on the bed and “have like family meeting. That means we get together to talk about what happened in school or to see the behaviors. And mostly we ask them what they want to be to grow up.” Jean also mentioned that they have created their own library at home with flashcards, learning posters on the wall, and their laptop with learning programs downloaded from the internet.

**Books.** Among the more interesting findings from the parent interviews that related to education and learning was the fact that all of the families interviewed had books in their homes. As Claire shared, “We have quite many books.” And Jean described about her unique home environment, “We have our own little library corner with books that are age appropriate to each child because I have three.” In addition, eight of the homes also had computers that were used for learning purposes. Only five of the
homes had educational games or toys. Heather talked about her home environment, “We have books. We have computers. They go on KidBiz. I just started having TV. I never had TV ever since Hailey was born. When we moved in 2005, we never had TV until like maybe last year.”

After school. When asked what children typically did in the afternoon after school, a little less than half of the activities had to do with education or learning. These activities included reading, homework, or attended an after school program that made sure that the children completed their homework. The majority of afternoon activities included playing, TV, sports, video games, hobbies, or chores. Ethan talked about Eric’s typical afternoon where he did not start his homework until evening, “Play after school. [He] used to go to A+, but not now. He plays before 8 pm and then comes home to do homework.” Eric roams the neighborhood until eight in the evening. All other families had curfews to come home before it gets dark, as Jean shared, “If the sun is down, it’s showering, having dinner, and getting ready for the next day. We also have family prayer.”

For Brian, it was all sports in the afternoon, “On a typical afternoon Brian boy has football practice. If it ain’t football, then it’s baseball. And if it ain’t baseball it’s something. Some sport. Some kind of sport.” And for Connor, it was a mix of academics and leisure as Claire shared, “Usually his homework. Like after school, they have to finish their homework first. After that he would play games, read books.”

Evenings. Six of the 10 families specifically mentioned that they make it a point to have dinner together to talk about the day. When asked when she gets to spend time with her family, Barbara shared, “It would be evenings. We always sit down and eat dinner together. That is an every night thing. After that, homework.”

On a typical evening at home, slightly higher than half the activities emphasized education or learning. These activities included doing homework, prayer/Bible study, talking, reading, using the computer, and going to the learning center in the housing development. George was very straightforward when describing their evenings, “After practice, finish up remaining work, take bath, talk story, watch some TV, sleep.” Barbara also shared their evening routine, “Once he gets home from practice its dinner, then
shower, and then I usually help them with homework and then after homework is bed time.”

Weekends. Parent interviews revealed that on the weekend, much of the focus shifted away from education and learning to more family-centered activities. Family activities focused on non-educational activities like going to the beach, water park, shopping mall, church, sports games, and movies accounted for three fourths of all activities that were mentioned. Heather shared about their family weekends and in addition to spending time at the church she shared, “I try to take them to the beach. When I got the water park pass I took them there.” Francine said that she and Faith, “Sometimes read and watching movies together. Go on the computer. She always goes on KidBiz.” On George’s family weekends, “We go to the beach. That’s learning. Bishop Museum during the special exhibits.”

Religion. Through conversations during the interview, seven of the families discussed attending church during the week and/or weekends. Diana depicted their family weekends, “Because I often go out, shop around, the beach, or the shopping, and things like that. Because the Sunday we go to church in the afternoon for 2 or 3 hours. The Bible verses, good, yeah that’s learning.” And Jean also shared, “We rarely go to celebrations. We don’t have too many friends. We have our parents and we have church on Sunday.” Heather mentioned religion discussing their evenings at home, “Reading, like I try to enforce that reading now. If they know, they have homework they bring home and they do that. We try to do some games from the Bible. And I want them to understand what the Bible says too.”

SES. When asked if they felt that their low income affected their child’s learning, eight of the parents said they believed that there was no impact. Heather stated, “I don’t think so. I try to just be grateful for what we have. I try to make them understand that, I’m not rich. Let’s just be grateful for what we have.” George was insightful in his brevity about the impact of their lower income on learning, “None really. It’s up to the student when it comes to learning.”

The two families that did connect their lower income to learning did not express concern about it having had a negative effect on the past formative years of learning.
Rather, Jean wished that they could currently send their children to more enrichment activities:

Financially, I can’t always provide what she needs, as far as extra programs. This summer I enrolled her in a summer reading program at UH. It was a blessing that we got financial help. But we have three, so it doesn’t always happen. So things like that. Extra support, extra help that we need that we don’t regularly get. If I can look it up online, I try to teach them myself. If not, we do it slowly over time.

Claire was concerned about future college tuition costs, “I’m kind of concerned about financials. In high school, middle school, or elementary is provided by the government. There’s no tuition. But later on yes, it’s going to be expensive. We try to save as much as we can.”

**Parental involvement.** In order to gain insight into how parents were involved in their child’s life outside the school day, the following five questions were asked:

1. Are you working right now? How many jobs? What are your working hours?
2. What time do you get to spend with your children during the week? How do you spend that time?
3. What time do you get to spend with your children during the weekend? How do you spend that time?
4. Describe a typical evening at home and your interactions with ______? What other types of interactions do you have with ______?
5. What economic challenges affected your parental involvement? How did you address them?

**Family time.** Six parents worked at least one job. One of the six parents had two jobs - one full time job and one halftime. Four parents were unemployed.

Their work schedules or their unemployment status allowed for nearly all of the parents to have the afternoons, weekends, and evenings off to spend with their children. Nine of the parents had weekends and evenings off, and seven had the afternoons off. All of the parents interviewed had opportunities in the evening throughout the week to spend with their children. And on the weekends, nine of the parents typically had the opportunity to spend the whole weekend with their children.
When asked about how this time was spent with their child, a little over half of the parent reported evening activities that had to do with education or learning. George reported, “We eat dinner together. I help them with their homework. If not, we watch TV together.” Ethan, shared, “I help with homework. After homework, sometime he like me cook something for him to eat, so I cook for him.”

Weekend time was inversely spent with roughly only a third of weekend activities having to do with education or learning, and two-thirds of weekend activities having to do with family related activities. Francine discussed her time spent with Faith on the weekends, “Evenings and weekend. Read together, go to beach, playing together. Sometime we go shopping together.” Diana described about her time spent with Dylan and his sibling on the weekends, “Weekend, yeah since I stay home weekend, whole day with them. For Dylan, his brother, and me, and my husband sometime on the bed or sometime go out or watching TV, or something fun like that.” Barbara talked about time spent with Brian and the extended family:

All day, everyday on the weekend. Most of the time it’s sports. If not, then it’s always family activities with my in laws or with my side of the family. Well, like this weekend, we went to Waianae where my parents live and we had a barbecue. And all of my mom’s side came over. And then we slept over in Waianae, and came home on Sunday. So that’s the kind of stuff we do. It always involves food.

SES. Three parents felt that their lower income status affected their involvement in their child’s lives. Amelia said that her work schedule definitely affected the time that she spent with Andres, “Having to work. And the hours. I have less time with Andres.” Jean indicated that she felt their financial situation sometimes affected her relationship with Jessica:

I think our financial situation can get in the way of our emotions. So I guess it affects our relationship between me and Jessica because I take my frustrations out on her. But for the most part, she's very mature for her age and she understands. But I always go back and touch up and apologize.
George felt that their lack of money affected the quality of activities that their family did together when he shared, "If I had more money it would be easier. I could afford more stuff. When you ain't got that much money, you only gotta do what you gotta do."

**Cognitive development.** This section of the interview focused on learning and cognitive development. The questions explored what parents knew about the developing child. The interview questions were as follows:

1. When do you think a child begins learning? What are things you did to help with that learning?
2. Did ____ go to preschool? How many years (if applicable)? Why or why not?
3. When did ____ begin to recognize letters? How did you help with that?
4. When did ____ begin to recognize numbers? How did you help with that?
5. When did ____ begin reading? How did you help with that?
6. How often did you talk to ____ as an infant? Toddler?
7. Were there other family members/friends who helped with ____'s learning? If applicable, how did they help?

**Learning origins.** The parents expressed a range of beliefs about when children begin to learn. Only one parent said that they believe a child begins to learn before birth. Jean thought that children begin to learn:

In the womb. I unfortunately didn't read [to Jessica while I was pregnant] too much, but I did read some. Most of the time I was working with her. And I think that was helpful because she's pretty bright. I think that what I did everyday for everyday work helped. She's pretty good with numbers. I work a lot with numbers. Just organization skill. She's like a mini me.

Five of the parents indicated that they believed that learning begins after birth, as Heather commented:

I think they learn since they were a baby. I really believe they start learning when they were babies. I always sing to her. I always talk to her. Even though she doesn't know, I always, try to, sometimes read the book. Read to her. I think talking to her, singing to her, I remember with Hailey, I always massage her. Her whole body so she started walking really early.
Francine thought that learning begins, “Young, about one year old. Not sure what did to help with learning. Played with toys together.”

Four parents believed that a child begins learning after three years of age. It is interesting to note that these parents were all of the Asian families in this study. Claire’s comment expressed their common perception:

I think about three is a good age to learn. Spend time with them. Talking, you know like chatting with them. So, because at that time they very curious. They want to know like a lot of things, so the more time you spend, the more time they will know. Because at three year old, they both went to preschool.

Ethan’s response indicated the highest age, roughly between five and six, “For him, I think about six years. Because fifth year he start preschool. So five year. He learns fast.”

**Encouraging learning.** When asked what they did to promote learning, the most common activity parents reported was to talk or sing to their children. This activity accounted for about a fifth of all the activities mentioned. As Heather shared about her time with Hunter, “I always talk to him. Even though he doesn’t know, I always try to, sometimes read the book. Read to him. I think talking to him, singing to him, I remember with Hunter, I always massage him.” The next most often mentioned learning activity was reading, and the third was to send them to preschool. Jean described how she integrated the learning into her daughter’s daily life by sharing that, “She was pretty good at writing her name, constantly pointing it out. So we had flashcards at home, but aside from flashcards, we always point out letters, at the doctor’s office, in the magazine, in the newspaper, anything we come across.” Some other examples of learning strategies that were mentioned once or twice were spending time, playing, doing homework, and using the television as a learning tool. Barbara shared her learning strategies with Brian, “I would read and make him watch educational television. Of course, I sent him to preschool for two years before he actually went into kindergarten.” Diana shared similar sentiments, “Dylan go for the Head Start school year. From the little one at home, and your work all day with them, and I talk and I play with them to do better.”
**Preschool.** Among the majority of parents interviewed, preschool was a factor in their child’s learning, with nine of the 10 parents having sent their child to preschool. Of those children, seven went to preschool for two years. There were various reasons for sending their child to preschool, but all of the parents gave at least one reason related to learning. For Claire, it was predominantly so Connor could learn to speak English, "Because we speak Vietnamese at home, so now it’s time for him to go to school so he has to learn English. So that’s why we send him.” Barbara also sent Brian to Head Start and shared that it supported her efforts as a working mother:

I sent him to preschool for two years. Being a working parent, when I came home I was really tired. That takes away from the time to teach your kid, so when sending them to preschool, that is what they're set on is to teach the kids. So it made it easier as far as him writing his name and ABC's. So I was very grateful for that.

On average, many children recognized some letters & letter sounds at ages three to four. Children typically learn all their letters between the ages of five and six. ("Typical Language Accomplishments for Children, Birth to Age 6 -- Helping Your Child Become a Reader,” 2005). Six of the children in the study began to recognize letters at ages three to four. One child was above average beginning at age 2½, two children were below average beginning at ages five to six, and another parent did not recall when his child began recognizing letters.

When it came to teaching and learning to recognize letters, all of the parents mentioned at least one hands-on, direct one-to-one participatory strategy. These strategies included using flash cards, having their child copy their writing, pointing out letters/labeling, helping sound out letters, singing, and using alphabet books. As Barbara shared:

They always have these games or toys that you can buy where you push the buttons that say, ‘A’ or ‘B’ and we always had that around and he liked to play with that. Singing the ABC's with him. Writing out letters and see if he can guess the letter.
Jean also shared how she worked closely with Jessica, “She was pretty good at writing her name…. So we had flashcards at home, but aside from flashcards, we always point out letters at the doctor’s office, in the magazine, in the newspaper, anything we come across.”

**Numeracy.** With respect to numeracy, children typically begin to recognize numbers at age three (“Your Three Year Old. Child Development Tracker,” 2014). Five children were on track with recognizing their numbers, two children were ahead, one child was behind, and another two parents could not remember when their children began to recognize numbers. Of all the strategies that the parents in this study reported using to teach numeracy, nearly 90% were direct hands-on and one-to-one strategies like writing, copying, explaining, labeling, and using number books. The other strategies included independent puzzles or games. Amelia shared her writing strategy with Andres, “Write numbers big. I ask, ‘What’s that?’ And he counts.” Jean shared what she did with Jessica, “Numbers were easier for her. It was before school and before letters. I would teach her the same, utilizing my fingers. Numbers were easier to teach than letters.

**Reading.** Parents were also asked about reading. Children typically begin to read around ages five to six (“Typical Language Accomplishments for Children, Birth to Age 6 -- Helping Your Child Become a Reader,” 2005). Eight of the children were on track, and two were ahead. Of all the teaching reading strategies mentioned by parents in this study, parents read to, read with, sounded out, or spelled with their children 81% of the time. Diana, Claire, and Ethan heavily depended on the teacher, school and homework to teach reading due to English being their second language. Diana shared, “Reading, I think him go school, Kindergarten. I cannot help that because English I don’t know how to read.”

**Talking.** When asked about how much talking occurred in the home, nine parents reported talking to their children *a lot or most* of the time as an infant. This level of talking a lot to their children as toddlers continued with nine of the 10 parents. It is important to note that the nine parents in the infancy group were not the same as the nine parents for the toddlerhood group. Francine and Amelia said that they could relate more with their child as a toddler, so spoke more; whereas Claire spoke to Connor more as an
infant. Heather shared how she talked with Hailey, “A lot! A lot of time. [Toddler] A lot. Of course, it’s like only me and her. I feed her and talk to her.” George also shared about his interactions with his children, “Everyday. Always. Because they were always with me. I just talk to them.” As Barbara shared about raising her son Brian, “[We talked to him] all the time. We never did like baby talk. [It] was always like regular talk. He was talked to all the time.” Claire, Ethan, and Diana spoke to their children mainly in their native language of Vietnamese prior to entering school.

**Family support.** Extra familial support was present when it came to helping the students in this study learn. Nine families had other family or friends who helped with their child’s learning. The greatest help came from immediate family members, such as siblings, cousins, and grandparents. There was no dominant way that immediate family helped, but the greatest number of strategies mentioned were talking with them and playing educational games with them.

**Family beliefs and values.** This portion of the interview sought to go deeper into each parent’s views about education and learning, and to make connections between family beliefs and the academic success of their child. The questions asked were as follows:

1. What do you believe about education?
2. What are your views on school attendance? How do you think attendance affects learning?
3. How has _____ been doing academically in school?
4. With regard to education, what would you like for your child in the future?
5. When your child does well or accomplishes something, what do you do? When your child does not do something well, what do you do?
6. When your child fails at something or faces adversity, how do they handle it? What do you do?

**Belief in education.** One thing that was clear was each family’s belief about the importance of education. All of the parents interviewed articulated a belief in a good education. When describing why education was important, nearly all of the reasons shared had to do with education leading to a better life with regard to being a better
person, better finances, increased knowledge, college and better jobs. Claire expressed this belief, stating:

I think education is like knowledge of power. It is to help you be a better person in society. Right now we live in like low income housing, and we want them not to follow our footsteps. Like to strive for a better life. And be more independent later on and be a helpful person in society.

Barbara expressed a similar belief, “I think education should come first in everything. I think it's very important. It's something I tell them all the time.” Amelia briefly stated, “Education is most important to us.”

Related to their belief in education, eight of the parents said that attendance at school was important. Of these eight parents, all but one parent mentioned that attendance affected learning. Barbara spoke to this urgency by saying, “I think kids should be in school everyday. School moves pretty fast. If they miss one day, they can miss a lot in that one day. And it's kind of hard to play catch up after that.” A little over half of the reasons for their belief in education had to do with obtaining a better life (e.g., finances, job, college), and the next highest amount of reasons for their belief in education had to do with being a better person (e.g., increased knowledge, better person). As George bluntly stated, “They have to attend school. School is a must. You cannot be a stupid person and get ahead in life. The less you here, the less you learn. The more you here, the more you learn.”

**Future goals.** Nine parents supported their children's future goals whatever they may be. Nearly all of the reasons they mentioned were to achieve a better life for their child (e.g., better job, better finances, and better person). Heather shared, “I believe it’s real important, because nowadays they need a degree. It’s better to have a degree to get a good job to get a lot of money. You gotta keep it up.” Six of the parents specifically stated they wanted their child to get a college degree. As Diana said, “Whatever he wants to do we gonna support him.” And Heather spoke of her expectations of Hailey:

I want her to have a Ph.D. when she becomes...I don't know. I really want her to get a degree right after high school in four years because I believe she can if she really puts her mind to it.
Rewards & discipline. With respect to rewards and discipline, eight of the families rewarded their children for doing well by giving or buying things for them. Parents noted buying things like Cheetos, iTunes cards, toys, food that they want, and even an iPod. Four of those families also rewarded their children by doing things together as a family like going to the beach, water park, or visiting grandparents. Six of the families rewarded their children by encouraging or helping them through challenging situations. George shared how he rewards Gloria:

Good job daughter! See, we don't have millions so we can't be paying her and bribing her and taking her all over. Good job. Maybe she gets to eat what she wants to eat. Or maybe we go to the beach since she wants to go. Little reward here and there.

Conversely, half of the families took away privileges or things in order to discipline their child. Only one parent reported using physical punishment.

Adversity. When faced with adversity, the majority of children were able to talk with their parents. The greatest strategy employed by parents to help their children through challenges was to encourage them. Heather shared a recent situation that she went through with Hailey, “First, she didn’t want to tell me. I try to understand. I told her it’s ok. I try to praise her. I sat down with her in the room, and I was hugging her. I try to encourage her.”

Teacher Questionnaire Results

Teachers were given an online survey to gain an understanding of their beliefs about success and how they align with parent beliefs. The three questions asked were:
Consider the most successful student that you’ve had in the past that has come from the Diamond Head Housing Community.

1. In what ways do you consider them a success? Explain.

2. What qualities or beliefs did this student possess that makes you consider them successful? Explain.

3. What qualities or beliefs of this student’s home environment helped with this success? Explain.
**Student success.** Teachers described their ideas about what makes a child successful. Their answers were varied, with 20 different characteristics reported, because each teacher mentioned multiple qualities when sharing their thoughts. The top response, which accounted for half of the answers, was that a child had goals and was goal-oriented. Three responses were the next highest: students who showed growth or gains, students who were motivated, and students who had a good and positive attitude. An example of a teacher’s response with multiple attributes of success is captured below:

The student I consider the biggest success I've had is one who I have seen grow the most over the last few years since having him in my class. Although he will never be a straight A student, he has developed into a motivated individual who now is in the average range, compared to when he first entered my class, there was talk of possible retention and referral into special education. Having developed more confidence, he has a large group of close friends and is currently involved in sports year round. The personal and academic growth I have observed in this student since I have had him as a student to where he is now is immeasurable. He now not only wants to go to college, (previously, he hoped only for a high school diploma) but also has the confidence and belief in himself that he will be a successful student athlete. Aside from the overall growth I have seen since having him in my class, he also was the most changed student I have had in one year's time. Again speaking to both personal and academic growth, I watched him blossom from a shy introvert who was roughly 2 grade levels behind in all subjects, to a more confident, social child who passed his math HSA and was only 13 points away from passing his reading HSA. He participated in class and I could also see a physical change in the way he carried himself taller that still carries over today.

When asked about what qualities or beliefs a child should possess to be successful, the responses most often given were a child having perseverance. The next highest responses were a child who believed in their own ability and had confidence, a child who loved learning and enjoyed school, and a child who demonstrated hard work and effort.
An example of one of the teacher's responses that embodied other comments by colleagues is as follows:

To be a successful student from a low SES, a student needs to be resilient, must be able to bounce back from setbacks in his/her personal and home life; in his/her school academic or social environment; and/or in other situations needing resolutions. Hope is just as important. A belief that things will get better, no matter the situation, can help a student move forward and be successful. A student needs to have perseverance, the inner desire to keep on going, to keep on trying, striving for resolution or accomplishment, whether there is a reward or not. A student also needs to have good self-esteem, that he/she can be successful in whatever the endeavor, and that it does not matter if the goal is reached or not, as long as best effort is given. A positive attitude towards learning is also important. Equally important, a successful student needs to have someone who can provide quality guidance and support when the need arises, a trusted individual. There are other qualities and many skills that help students to be successful individuals, but I believe these are most important qualities to have in order to be successful.

From the teachers' perspectives, the two greatest attributes of the home environment that contributed to student success were parent support and parents who value education. Other home attributes noted were parents who pushed attendance, finishing homework, parents who push their children to do well, parent involvement, read or read to daily, ready to learn, and parents who provided or took advantage of extracurricular opportunities. Another example of a teacher's response that mentioned multiple attributes regarding the role of the home environment was:

Home environment played a key role in her success. Her parents were actively involved in her life. They probably didn't know all the answers to her subjects (science, social studies, etc.), but they supported her and gave her access to places that might have the answers like the public library. She also was in environment/culture where school was valued and appreciated...academic success was important...going to college is a priority. Finally, having role models like parents and extended family members who are walking the walk or displaying
traits that are needed in society to succeed -- work ethic, ownership, cooperation, mental toughness, and commitment.

**Resilience theory.** The qualities from Resilience Theory that teachers shared included qualities like being goal-oriented, being curious, having a positive attitude, and having confidence. One teacher talked about one of her successful students and shared: The belief this student gradually acquired that made him successful was a belief in himself. Once he realized that he was not pigeon-holed into the stigma that others held for him, he was able to take off and soar on his own. After experiencing initial small successes, he turned himself into a motivated student and class role model that illustrated the change in how he perceived himself. In my class, he was never told he couldn't do it, or shouldn't do it, so he never knew he wasn't supposed to do it. Therefore, with confidence and belief in himself, he managed to push himself to reach all the goals he set out to accomplish.

A different teacher talked about another student and noted some attributes of a resilient child by sharing, “I consider this student a success because of her academic achievements, positive attitude about school and learning, and her ability to dream about her future despite her social-economic environment.”

**Growth mindset.** Qualities like loving learning, having determination, being a hard worker, and persevering were qualities that were listed and related to the Growth Mindset Theory. One teacher wrote about her student and shared:

Some of the qualities this student possessed were determination, perseverance, and a positive attitude toward learning. This student was a determined boy who did not give up. He gave good effort when working in class. It seemed that he enjoyed coming to school and was very interested in learning new concepts. He also demonstrated leadership qualities.

Another teacher wrote about her student by sharing, “This student was curious, persistent and did not get discouraged when goals were harder to accomplish. She also participated in activities/topics that were not in her ‘comfort zone’ such as sports, dance, and music.”
Parent Follow Up Questionnaire

After completing the parent interviews, a follow-up questionnaire was mailed to all the parent participants for additional information and clarification (See Appendix C). Seven parents filled out a survey consisting of five questions. Parents were asked of their perceptions of their child’s success and their perceptions of DHES. The following section presents and discusses the parents’ responses.

Table 4.1 - Why do you think your child is successful?

<table>
<thead>
<tr>
<th></th>
<th>Heather</th>
<th>Heather</th>
<th>George</th>
<th>Barbara</th>
<th>Jean</th>
<th>Faith</th>
<th>Claire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent focus on education</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents push child</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Parents believe in child</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Good morals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoy school</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Teacher and staff</td>
<td></td>
<td>x</td>
<td></td>
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<tr>
<td>School is a partner</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
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</tr>
<tr>
<td>Child does homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Child is responsible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Child reads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Child does well on tests</td>
<td></td>
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<td></td>
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<td>x</td>
</tr>
</tbody>
</table>

The first question on the survey asked, “Why do you think your child is successful?” (See Table 4.1). Seven parents gave 12 different answers to the question. There was only one duplicate answer, with both Claire and Faith mentioning that they felt their children were successful because they did well on tests. Faith replied, “Because she does her homework everyday without my reminding her, and she always read for 30 minutes and she corrects her mistakes for her test. And she let me sign it when she finished.”

On the second question on the survey, “What qualities do they have that make them successful?” parents mentioned 18 separate qualities to describe their child (See Table 4.2). Out of the 18 qualities, there was only one that was a duplicate. Jean and
Claire shared that they felt that one of the qualities that helped their child to be successful was that they were good listeners. As Claire wrote about Connor, “Good listener, always try his best, show passion & be optimistic toward his study.”

<table>
<thead>
<tr>
<th></th>
<th>Heather</th>
<th>Heather</th>
<th>George</th>
<th>Barbara</th>
<th>Jean</th>
<th>Faith</th>
<th>Claire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good memory</td>
<td>x</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Good test scores</td>
<td>x</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Respectful</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
<td>x</td>
<td></td>
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</tr>
<tr>
<td>Concentration</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
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</tr>
<tr>
<td>Willing to learn</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Patience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listens</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does homework</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Does TeenBiz</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Takes notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Studies for tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Passion for learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Optimistic</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Does their best</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

The third question asked was, “What do you want your child to get out of school besides academics?” The answers for this question were also numerous with 17 different answers (See Table 4.3). Similarly to the previous two questions, only two parents reported the same answer. Claire and Jean both wrote that they hoped that their children learned morals in school. Other answers shared were responsibility, confidence, independence, character, empathy, and professional and vocational skills.
Table 4.3 - What do you want your child to get out of school besides academics?

<table>
<thead>
<tr>
<th></th>
<th>Heather</th>
<th>Heather</th>
<th>George</th>
<th>Barbara</th>
<th>Jean</th>
<th>Faith</th>
<th>Claire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fix Cars</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fix Washers</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifelong friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Experiences</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Good Character</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Confidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Morals</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Finish college</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Become a doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Become a teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Good education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>x</td>
</tr>
</tbody>
</table>

The fourth and fifth questions shifted topics from parent perceptions of their child's success to the parent's perception of DHES. The two questions were, “What is your perception of Diamond Head Elementary School?” and “What's going on at Diamond Head Elementary School that has helped them to be successful?”

There was relatively the highest agreement among the parents on the question about the perception of DHES (See Table 4.4). Previous questions proved to have little or no agreement, but in this question, three parents agreed that DHES had a caring faculty, supportive staff, and nurturing qualities. Claire, Barbara, and Francine mentioned these things. Francine specifically shared, “Diamond Head Elementary School is a really good school because the teachers and staff are really caring, they’re easy to talk about everything.”
Table 4.4 - What is your perception of Diamond Head Elementary School?

<table>
<thead>
<tr>
<th></th>
<th>Heather</th>
<th>Heather</th>
<th>George</th>
<th>Barbara</th>
<th>Jean</th>
<th>Faith</th>
<th>Claire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach children to be productive</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach children to be on time</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach children to read</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach children science</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help the environment</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Principal is driven</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Caring, supportive faculty/staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

With respect to how DHES has helped students to be successful, there was no agreement among parents (See Table 4.5). There were 13 different factors mentioned as to what is happening at Diamond Head Elementary School, but *none* of the parents gave duplicate responses. Barbara’s opinion was, “The teachers work really hard to get the kids ready for the big test!” Faith shared her thoughts on the question, “It's how the teachers show the students they really care, and built confident toward the kids.” Claire mentioned multiple factors, “Keeping them on track, motivating them, showing encouragement, guiding them with positive attitude about school.” All the answers given by the seven parents expressed different ideas about how DHES affected student success.
Table 4.5 - What’s going on at DHES that has helped them to be successful?

<table>
<thead>
<tr>
<th></th>
<th>Heather</th>
<th>Heather</th>
<th>George</th>
<th>Barbara</th>
<th>Jean</th>
<th>Faith</th>
<th>Claire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage good attendance</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading everyday</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage being on time</td>
<td>x</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Head Start</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fun environment</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers work hard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>High expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Caring teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Builds confidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Motivating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Encouraging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Guiding</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>x</td>
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</tr>
</tbody>
</table>

Examining the responses as a whole, the only pattern that emerged was that there was no pattern. Practically every answer from the seven parents was different for every question. It was similar to the results of the teacher questionnaire on student success where their answers were diverse and spread out, with very few duplicate answers.
CHAPTER 5
Interpretations, Conclusions, and Recommendations

Methods and Procedures

This case study research set out to look more closely at families of low SES and their impact on the success of their children in school.

The three questions that guided the study were:

1. What qualities outside of the school environment of low SES students impact success in school?
2. What beliefs in the home environment of low SES students impact success in school?
3. How do Mindset Theory and Resilience Theory relate to the success of students of low SES?

Ten students who live in a low-income housing development were chosen because of their success in school. Eight of the 10 students were chosen because they were academically successful in the traditional sense by being proficient or above in both grades and standardized state tests. Two of the 10 students were chosen because they had the highest gains in standardized state test scores, and did not necessarily meet proficiency on grades or the state test. These two students were considered to be successful in a non-traditional sense.

Parents of these 10 children were interviewed to find out what low SES families believe and do outside of the school day that affects the success of their child in school. There were also teacher and parent questionnaires in this study. Ten teachers were given a questionnaire that sought to understand what teachers believed about student success and to see how teacher and parent beliefs align.

The primary focus of this study was to learn more about the life of successful low SES students outside of the school day. Questions in the parent interview emanated from the literature review and were organized into five overarching topics of family demographics, home environment, parental involvement, cognitive development, and family beliefs & values.
Discussion of Research Questions

What qualities outside of the school environment of low SES students impact success in school? This was the first question that was originally posed in this study. The answer can be summed up by noting that the families of these successful low income students, in many ways, replicated the home environment of stereotypical middle to higher income families. The families in the study may have been living in a poverty situation, but the home life they have created was not educationally impoverished. Their homes were filled with family support, educational stimuli, and most important, educational focus and priority.

Parent involvement in learning. Nine of the parents had the opportunity to spend the whole weekend with their child. This is similar to and perhaps above the norm of stereotypical middle and higher income families, who tend to have the work schedules that allow for more family time. Activities in the evening and on the weekend were split with a little over half of the activities being educational in nature and the remainder of activities being family oriented.

Research has shown that when parents get involved in their child’s education, “students tend to earn higher grades, attend school more regularly, stay in school longer, and enroll in higher level programs” (Van Rockel, 2008, p. 1). The parents in this study talked about various ways that they got involved in their child’s learning. All parents who were interviewed noted that they were involved in their child’s learning and engaged in hands-on approaches to teaching their children to recognize numbers and letters. Although every parent reported taking an active role in teaching their children, only one expressed that learning occurs before birth. Since the 1980’s, researchers have suggested that learning begins during the fetal stage. A well-known study into prenatal learning showed how newborn babies who were read The Cat in the Hat when they were a fetus preferred hearing that story read to them after birth as compared to hearing a new story (Decasper & Spence, 1986). Despite nine parents reporting the belief that learning begins at various stages after birth, these parents did get a jump on learning prior to any formal schooling. Nine of the families sharing that they talked a lot to their child as an
infant and toddler, and six of the parents interviewed were not working at the time and stayed home with their child.

Parents shared that they sat with their children and used books to point out letters and numbers, parents used flashcards, they helped their children to write letters and numbers, and they sang the ABC’s together. Parents also integrated their child’s learning into daily life by always pointing out letters and numbers when they saw them. This focus on learning after birth helped to lay a solid educational foundation for the students in this study.

Children will first begin to read around five or six years of age (Neuman, Copple, & Bredekamp, 2000; Snow, Burns, & Griffin, 1998). Using this as a gauge, eight of the students were on track for reading and two of them were ahead as reported by parents.

**Resources in the home.** Every family in this study made it a point to have learning resources in the home and spent the time to engage in learning. All of the families interviewed, had books in their home and nine of the families had computers. A large body of research has shown that poverty and an impoverished home environment have a negative impact on the cognitive level and academic success of students (Bradley & Corwyn, 2002; Ram & Hou, 2003). The parent interviews in this study have revealed that although all the families live in poverty as evidenced by their living in a low-income housing development, the children in this study have not grown up in an impoverished home environment.

**Television.** Only Barbara mentioned using television as a learning tool to teach literacy and numeracy. Possibly, families do not recognize the television as a learning tool, but the majority of families simply did not mention using the many learning resources currently available to families via the television (e.g., DVD’s, regular programming on multiple learning channels, etc.). On average, children under the age of 5 spend 32 hours a week watching television, and children ages 6-11 spend about 28 hours (McDonough, 2009). This lack of use of the television in these families may be beneficial towards their child’s learning because excessive television viewing can contribute to poor grades (Rideout, Foehr, & Roberts, 2010), and less time doing their homework (Vandewater, Bickham, & Lee, 2006). Rather, families in this study chose to
engage their child in learning experiences that involved direct contact like reading together, talking together, and pointing out letters. One likely explanation for the minimal use of the television as a learning tool is the cost factor and the need for equipment, cable subscription, and internet connection. Directly engaging with their child is a very low cost activity.

**Family support.** Eight of the ten families in the study had both parents in the home. And whether it was because parents did not have a job or because parents were married, families spent a lot of time together where an adult played a significant role in the child’s life. Another attribute that families had in common was having other family or friends helping with their child’s learning. Nine out of the 10 families that were interviewed shared that they had an older sibling, family relative, family friend, or spouse who was able to help with their child’s schoolwork and learning. This is important for providing the intellectual support to learning outside of the school day and not leaving a child alone to independently make sense of their learning to possibly create learning misconceptions (Paredes, 2011). More importantly, is the value of education that is subconsciously being engrained in these students that learning is important and that the family, as a whole, will place their human capital into it (Lareau, 2000).

**Religion.** Religion, although not a focus of this study, emerged as a prominent practice in most of the families’ lives. During the interviews, seven of the families shared that they attend church and practice their faith.

There has been a lot of research on how religion may benefit society. There are also studies that have shown the positive affect that religion has on people living in poverty in relation to their marriages, health, families, and children being more well behaved (Brown & Gary, 1991; Jang & Johnson, 2001; Larson & Johnson, 1998).

In addition to going to church on the weekend, religion also played an integral part in families’ lives during the week. Parents talked about reading the Bible together, praying together as a family, playing Bible games, and engaging in family Bible study. Parent religious involvement and the depth of that involvement have also shown to have a positive correlation to higher educational expectations of their children, children pursuing
advanced courses, spending more time on homework, avoiding cutting classes, and successfully graduating (Muller & Ellison, 2001).

Beyond just the families in this study, religion plays a large role in the Diamond Head Housing Development. Surrounding the housing development are multiple churches of varying denominations. Two different churches have services at Diamond Head Elementary School, eight other churches are within two miles of the housing development, and one outside church goes into the housing development with a bus every weekend to transport families to their church. In addition, when there are events within the housing like meetings or community clean ups, prayer is said before the event, making religion an open and acceptable practice in the Diamond Head Housing Development.

**Marital status.** The families in this study did not seem to fit into the mainstream of families living in poverty throughout this nation in terms of marital status. Based on US Census Bureau data, nearly 70% of families living in poverty with children, have a single parent as head of the household (Rector, 2012). Of the families interviewed in this study, only two of the students came from single parent homes. This is contrary to many children living in poverty situations who often find themselves left alone in the home, left to care for a younger sibling(s), or left to roam the community in unstructured situations.

**Family time.** The families in this study not only spent time together, but also spent what many would deem quality time together. On a typical evening at home, six of the families had dinner together, and seven families made sure their kids did their homework or did it with them. Other notable family activities included hanging out, reading, watching television together, and spending the time to talk as a family.

Typically on the weekend, the most common activities that families did together were going to the beach, going to church, or working on homework. These activities that families engaged in weekly, not only add to the academic development of a child, but more importantly, provide a safe environment to positively grow socially, intellectually, and emotionally. Research has shown the negative affects of an unsafe home environment and its affect on child development. Things like not being ready for school, lower language and cognitive development, behavior problems, depression, anxiety, and
aggression (Vernon-Feagans, Garrett-Peters, Willoughby, & Mills-Koonce, 2012; Trentacosta et al., 2008).

Having both parents as a part of the family structure adds to the amount of time children spend with their parents. If one parent was working, another would still be around. This allowed for all of the parents having time to spend with their children on evenings and weekends, and reporting of quality experiences for their children.

**Living in poverty.** Another anomaly related to the family demographic information in this study had to do with the amount of time that each child has been living in poverty. A plethora of studies have shown this opposite correlation between poverty and academic success, and it transcends ethnicity (Berliner, 2006). Children coming from families living in poverty are more likely to be academically behind their higher SES peers (Dye & Johnson, 2007). Yet, nine of the students in this study have shown that they are academically successful and have lived in a poverty situation for five or more years. This amount of time means that nine of the students have lived in poverty for more than half their lives. Of greater significance is the fact that six of the students have lived with poverty their entire life and have still overcome obstacles to do academically well in school with eight of the children being on track or ahead in their reading development.

This suggests that the positive learning environments and high expectations that these parents living on a lower income have for their children have helped them overcome the odds (Jeynes, 2005). These parents have created home environments where poverty has not defined them. Eight of the families felt that their lower income situation did not affect their child’s learning.

**What beliefs in the home environment of low SES students impact success in school?** This was the second question that was posed in this study.

**Discipline.** In general, poverty has many negative affects on the family (Milne & Plourde, 2006; Sanbonmatsu, Kling, Duncan, & Brooks-Gunn, 2008). A large negative effect has to do with childrearing and how parents discipline their children. Due to the many stresses on the family whether it be financial, health, social, or a host of other
stressors, disciplining of children leans towards seeking the quickest results. This means using physical punishment as opposed to reasoning and negotiating. Physical punishment does not take much thinking on the part of the parent who is dealing with multiple stressors (Driscoll & Nagel, 2007). One of the things that parents had in common was how they disciplined their children. Of the 10 families who participated, nine families did not use physical punishment. Parents reported that they employed proactive techniques and utilized positive reinforcement as eight of the parents noted they rewarded their children by getting them things or doing things together as a family. Examples of positive rewards mentioned were small things like buying a bag of hot Cheetos, giving words of praise/encouragement, or going to the beach.

**High expectations.** Recent studies (Jeynes, 2005) have shown that the traditional definition of parental support is far more elaborate than previously noted. Meta-analyses show that low SES parents get involved in more subtle ways like having high expectations of their child, communicating with them, and their style of parenting. The expectation to do well is far more relevant and urgent to children of low SES due to the context in which they live. Families that were interviewed all believed in the importance of education and communicated that to their children. Even Barbara and Amelia, parents of children who were successful in the non-traditional sense, had a strong desire for their child to do well in school. They also were involved in their developing child by reading with them, talking to their children, providing books for them, etc. Nine of the families shared support for their child’s future and education.

School attendance was specifically mentioned as important to eight of the families, and those parents drew a direct correlation between being in class and its effect on their child’s future. Parents understood the importance of having their child be in school to gain knowledge and to keep up and not fall behind. A study done in California of students of all ranges of SES, considered the impact of absenteeism on reading levels by the third grade (See Figure 5.1). The negative correlation between absenteeism and reading scores was significant and created gaps in learning. This gap is compounded as reading is the foundation to almost all learning.
This compounding effect of absenteeism on learning affects students far beyond just third grade. The affect of missing school in the early years can also be seen in fifth grade even when attendance was improved by third grade. A study that pulled its data from a nationally representative data set of low-income students showed that chronic absenteeism in Kindergarten affected performance in the fifth grade (See Figure 5.2).

Average reading scores were the most affected by absences with about a 6% gap between students with no attendance issues and those low SES students with a chronic absenteeism problem.

Parents in this study intuitively understood the importance of being in school and its impact on academic success and their child's future. One of the two highest factors that teachers noted for the impact that the home environment played on the success of
their students had to do with parents valuing education. Related to this value that parents placed on school, was teachers mentioning that parents who pushed good attendance in school helped in the success of the child. With parents’ beliefs aligned with the teachers, parents understood the importance of attendance and its impact on not only their child’s academic success but future success. These families in low income situations often believe that their child’s performance in school leads to different pathways in life.

How do Mindset Theory and Resilience Theory relate to the success of students of low SES? This question was the third and final question in this study.

Resilience theory focuses on children who have lived through extremely high-stress situations during their developmental years, and it focuses on how they have overcome those situations to lead successful adult lives. Examples of some of these high-stress situations include alcoholism, abuse, poverty, and war. Some of the traits of resilient children are:

- At least average intelligence
- Healthy, active, sociable children
- Curious & interacted with their environment
- Having family and non-family provided unconditional love
- Structured home environment
- Positive self concept

The Growth Mindset is more directly related to education and focuses on the process of learning as compared to the product. In a fixed mindset, parents and children believe that their intelligence is set, and nothing can be done to change it. On the contrary, parents and children who believe that their intelligence can be changed with a growth mindset have productive beliefs that are conducive to academic success. Perseverance and motivation to learn are natural outcomes of the Growth Mindset.

Teacher definition of student success. The teacher questionnaire was one set of data that was used to see if the qualities that relate to Mindset and Resilience Theory were present in successful low SES students.
Teachers were asked to share what qualities and beliefs students possessed that contributed to their success. Of the 39 different qualities that were shared by teachers, 86% of them were related to either the Growth Mindset or Resilience Theory. The qualities that teachers chose to describe a successful student had a high percentage of responses that related to one of the two theories. Some of the qualities of students that were described by teachers were being motivated, having perseverance, inquisitive, loved learning, good effort, works well with others, etc.

**Parent definition of student success.** When it came to parents, the answers that were shared did not necessarily match qualities of the Growth Mindset Theory, but had more to do with Resilience Theory.

Growth Mindset Theory did not emerge as a factor in parent beliefs or family practices that promoted learning. Responses did not revolve around qualities like learning from criticism, encouraging effort, or taking on challenges. To the contrary, there were five parents who mentioned a quality of a Fixed Mindset that focused on the product of learning (e.g., grades, test scores, homework scores) and not the process (e.g., failing, improving, and persevering). Barbara was the only parent who used elements of the Growth Mindset model in her use of encouragement to cultivate perseverance with Brian. As she said, “Just because it’s hard, doesn’t mean you don’t give your best. And if you fail the first time, it’s ok. You have to get back up and try again. Anything that’s worth it is gonna take hard work.”

This suggests that there is something within the parents and their families other than the qualities of a Growth Mindset that help their children to be successful students in school.

**Conclusions**

Three dominant themes emerged from the interviews with and surveys of the families about their home lives, child rearing activities, and attitudes and perceptions about their children and education. These were:

1) The majority of families in this study did not seem to feel victimized by their poverty.
2) All of the families in this study valued an education.

3) All of the families spent time together, daily and on the weekends, during which the adults engaged with their children in both learning and recreational activities.

**Not a victim of poverty.** Eight families in this study directly stated that they did not feel that their low income had affected their child’s learning. The two families that did mention concern about their low SES, also talked about how they were addressing the problem to overcome it. Some of the characteristics of a poverty mindset are focusing on all the problems in their lives and thinking that life is just not fair, they blame others instead of taking responsibility, and they focus on negative events in their lives that they have no control over. None of the families in this study sounded like they were victims, but rather, expressed empowerment. Throughout the interviews, parents talked to their children about their beliefs of hard work, perseverance, self-reliance, and responsibility. Getting away from feeling like a victim and taking control of their situation, seemed to have helped these families to focus on positive improvement as opposed to stereotypical poverty issues like domestic violence, an unstable home life, drugs, and alcohol.

The families in this study have empowered themselves to focus on things that mattered to them like education and family values.

**Valuing education.** Another overarching contributing factor to the academic success of the children in this study was their parents’ belief in the importance of education. Every single family in this study expressed the belief that education was important and acted upon this belief in ways to support their children’s academic achievement in school. This permeated their family life and extended to activities outside of school.

Some of the actions that families engaged in that demonstrated their belief in the importance of education were:

- All of the parents making sure that books were in the home
- All of the families utilized hands on approaches to teaching letters and numbers
- All of families focused on completing homework
- Nine families sent their children to preschool
• Nine parents talked *a lot* to their children as infants and toddlers
• Nine of the families had other family members or friends who helped with their child’s learning

Combining all these practices with the belief in education has had a definite impact on the academic success of their children.

**Family time.** Parents in this study reported engaging with their families and children in highly interactive ways, such as family meetings, hanging out and talking with each other, having family bible study, and going to the beach together. Whether it was due to being unemployed or the hours that they worked, all the parents were able to spend at least one day on the weekend together as a family. The majority of the families also had evenings and afternoons to spend with their children where the majority of activities were related to education like reading and making sure homework was completed. This family time, especially during the formative years, helps to provide stability for these children to develop socially, emotionally, and psychologically. This solid family foundation also seems to have shielded the children from the negative conditions often associated with poverty and contributed to their academic success in school.

**Recommendations**

Although the sample size of this study is small and the findings cannot be generalized to larger populations, they offer a basis for future practice and research related to supporting the educational experiences of children in families living in poverty and low-income housing.

**Practice.** Parent actions before formal schooling have a tremendous impact on positively changing the trajectory of future academic achievement. There are many concrete things that families can do to increase the probability of academic success. Some highlights are:

• Constantly talking to their children as infants and toddlers
• Sending their children to a preschool program like Head Start
• Getting books in the home
• Taking the time to teach letters and numbers before Kindergarten
• Spending quality family time together

Once formal schooling does begin, parents can increase the probability of academic success by:

• Promoting good attendance
• Establishing good homework habits
• Reading daily
• Continuing to speak constantly and encouraging dialogue
• Developing perseverance

Many times, parents living in conditions of poverty, especially parents who are not native English speakers, do not have the language skills, education levels, or access to the resources to support and engage with their children in these activities. Based on the findings from the research, the Diamond Head Housing Development have encouraged private donors to invest in an early childhood summer program. Beginning this summer, three to five year old children will participate in a six-week preschool program in the learning center. A certified teacher and multiple high school student aids will provide learning experiences for the children and their parents.

Science magazines have also been provided for every child at Diamond Head Elementary School to take home, and they receive a new magazine every month. In addition, free newspapers are provided to parents on a first come, first served basis to encourage student and adult reading.

Research. This study included only the parents and teachers of students identified as being successful in school. Future research that includes these role groups and all of the children in the families might often be a more in-depth picture of the conditions leading to children’s success in school.

Although nearly half of the student population at Diamond Head Elementary School is Micronesian, only one Micronesian family was represented in this study. This suggests that further investigation into Micronesian families’ experiences adjusting to a Western model of schooling and living in low income housing could help inform principals and educators about ways to support their children’s success in school.

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In this study, religion was not addressed, and yet, some aspect of religion was brought up through conversation in seven of the families. Some areas of recommendation for further study would be:

- To look into whether religion has helped to play a role in the positive changes in the housing development
- The degree to which religion has impacted the community and academic achievement
- To investigate the possible relationship that religion, churches, or a common community gathering place has on family and community values.
- Examining the relationship between work hours and family time, and the effect it has on children’s performance in school

Although one of the major research questions in the study examined the Growth Mindset model with respect to parents supporting student success, only one parent in the study reported using any of the model’s elements. Future research examining what low income parents do that falls outside of the Growth Mindset to support their children’s learning might be useful.
Appendices

Appendix A – Parent Interview Questions

Name: __________________________
Relation to Student: ____________________
Student Name: __________________________

Parent Interview Questions

Demographic Questions:

1. How many years have you lived in the Diamond Head Housing?
   a) 1-3 years  b) 4-6 years  c) 7-10 years  d) 10+ years

2. Marital Status?
   a) Married  b) Never Married or Single  c) Divorced or Separated
d) Unmarried Partners or Domestic Partnership

3. Highest Level of Education Completed:
   a) GED  b) High School Diploma  c) Trade School Diploma
d) Community College Degree  e) College Degree  f) Other

Home Environment:

1. How many adults live in the home? How many children live in the home?

2. What things do you have in the home that is related to education or helps with learning? (e.g., books, toys, electronics)

3. On a typical afternoon after school, what does ____ do? What other things does ____ do after school?

4. Describe a typical evening at home. What other things does your family do in the evening?

5. Does your family do anything on the weekend that’s related to school or learning? Explain.

Parental Involvement:

1. Are you working right now? How many jobs? What are your working hours?

2. What are your views on school attendance? How do you think attendance affects learning?

3. What time do you get to spend with your children during the week? How do you spend that time?
4. What time do you get to spend with your children during the weekend? How do you spend that time?

5. Describe a typical evening at home and your interactions with _____? What other types of interactions do you have with _____?

Cognitive Development:
1. When do you think a child begins learning? What are things you did to help with that learning?

2. Did _____ go to preschool? How many years (if applicable)? Why or why not?

3. When did _____ begin to recognize letters? How did you help with that?

4. When did _____ begin to recognize numbers? How did you help with that?

5. When did _____ begin reading? How did you help with that?

6. How often did you talk to _____ as an infant? Toddler?

7. Were there other family members/friends who helped with _____’s learning? If applicable, how did they help?

Family Beliefs & Values:
1. What do you believe about education?

2. How has _____ been doing academically in school?

3. With regard to education, what would you like for your child in the future?

4. When your child does well or accomplishes something, what do you do? When your child does not do something well, what do you do?

5. When your child fails at something or faces adversity, how do they handle it? What do you do?

6. How do you believe your SES affects _____’s learning? How do you address it?
Appendix B – Teacher Online Questionnaire

Research Title: Beliefs and Qualities of Families of Low-Socioeconomic Status (SES) That Promote Student Success in School

The HIDOE reminds you that this questionnaire should be completed during non-work hours.

This is an anonymous survey so please do not provide any personally identifiable information like grade level or room number. In addition, please do not use any student or family names.

******
You are about to answer 3 questions related to student success.

When answering these questions, consider the most successful student that you’ve had in the past that has come from the Diamond Head Housing Community.

1. I understand that completion and submission of the questionnaire will be considered as my consent to participate in this study.

☐ Yes
☐ No

2. In what ways do you consider this student a success? Explain.

3. What qualities or beliefs did this student possess that makes you consider them successful? Explain.

4. What qualities or beliefs of this student’s home environment helped with this success? Explain.
Appendix C – Follow Up Parent Questionnaire

Follow-up Questions:

1. Why do you think your child is successful?

2. What qualities do they have that make them successful?

3. What do you want your child to get out of school besides academics?

4. What is your perception of Diamond Head Elementary School?

5. What’s going on at Diamond Head Elementary School that has helped them to be successful?

(If you need more space, you can write on the back)
REFERENCES


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