

Parental Expectations and Aspirations for their Children's Educational Attainment: An
Examination of the College-Going Mindset among Parents

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Monica J. Jacob

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Abstract

The purpose of this study was to explore parental aspirations and expectations for their children's educational attainment, in addition to examining parent-reported knowledge and understanding of college readiness and preparation. This study consisted of 598 parents of students in 8th-10th grade from five schools in the Midwest. Parents were administered the *Scale of Educational Aspirations and Expectations for Adolescents (SEAEA)*, and were also asked to answer several questions related to their college knowledge. After a factor analysis of the *SEAEA*, items reflecting aspirations and expectations loaded onto the same factor; however, further analyses revealed a small, yet significant difference between the two beliefs. Results also indicated a gap between what parents aspire and expect for their children's educational attainment and the knowledge of what it will take for that dream to become a reality. Merits and limitations, implications for research and practice, and directions for future research are discussed.

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Chapter 1

Introduction

In college, I worked with Americorps and spent a summer teaching inner-city teenagers about college readiness. As I began to get to know my students, I realized that this task would be much larger than I initially anticipated; my students had never even considered college as an option for their futures, let alone learned what it would take to get into college and be successful. Over the course of the summer, I had the opportunity to meet with all of their parents individually and discovered that while many of the parents dreamt of their children moving out of their current neighborhood and going to college, most of the parents did not even expect their child to do so much as graduate from high school. This message was no doubt communicated to their children, as quite a few of my students talked about dropping out of school once they turned 16. Seeing this kind of culture where nearly everyone had low educational expectations made me think about self-fulfilling prophecies. If no one—not a teacher, parent, or the student herself—expects a continuation of education, why would the student think it was a reasonable option to continue?

While the majority of high school students aspire to continue their education after high school, the percent of students who successfully complete a college degree is startlingly low (Kirst & Venezia, 2004). The high percent of students entering college and dropping out before the completion of a degree has drawn the attention of researchers and educators, particularly in the area of high school standards and preparation for college level work. In response to the misalignment of standards between high school and

college, the National Association of System Heads and the Education Trust developed a universal goal (1999):

Our nation is no longer well served by an education system that prepares a few to attend college to develop their minds for learned pursuits while the rest are expected only to build their muscles for useful labor. In the twenty-first century, *all* students must meet higher achievement standards in elementary, secondary, and post-secondary schools and thus be better prepared to meet the challenges of work and citizenship.

Although holding a universal goal of high standards for all is absolutely critical, education does not solely occur in the context of the school. It is imperative to have an understanding of the beliefs held by parents in order to address the low percentage of students obtaining a college degree. Early research examining the impact of parental expectations posited that parents who have high expectations for their children set high standards and make high demands of their children beginning at an early age; these high standards and demands in turn result in high academic achievement (Boocock, 1972). More recent research also has highlighted parental aspirations and expectations as critical factors in student achievement (Fan & Chen, 2001; Halle, Kurtz-Costes, & Mahoney, 1997), student competency beliefs (Benner & Mistry, 2007), student expectations (Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001; Marjoribanks, 1995), and students' eventual educational attainment (Glick & White, 2004). Although the particular problems within the literature regarding the definitions of aspirations and expectations will be discussed later, aspirations may be thought of as a "hope" or "desire," while expectations may be thought of as a more realistic belief.

Research examining predictors of parental expectations and aspirations for the educational attainment of their children has predominantly focused on basic demographic

variables. Socioeconomic status has been demonstrated to be a significant predictor of parents' educational expectations and aspirations for their children (De Civita, Pagani, Vitaro, & Tremblay, 2004; Singh, Bickley, Trivette, Keith, & Anderson, 1995; Zhan, 2006), as has parents' own levels of educational attainment (Davis-Kean, 2005; Englund, Luckner, Whaley, & Egeland, 2004; Gill & Reynolds, 1999). The research has demonstrated that parents who are of lower socioeconomic status, as well as parents who have completed lower amounts of school, expect their children to complete less education than parents who are of higher socioeconomic status and have attained more education. Parents also tend to hold higher educational expectations for girls (Gill & Reynolds, 1999; Hossler & Stage, 1992; Raty, 2006) and for children who have had previous academic success in school (Englund et al., 2004; Singh et al., 1995).

Research has consistently demonstrated that parental expectations for their children's educational attainment strongly predict academic achievement. Parental expectation for educational attainment has positively predicted students' achievement test scores (Benner & Mistry, 2007; Neuenschwander, Vida, Garret, & Eccles, 2007; Singh et al., 1995; Zhan, 2006), as well as GPA (Seyfried & Chung, 2002). Research has also demonstrated that parental aspirations and expectations significantly predict student expectations (Benner & Mistry, 2007; Goyette & Xie, 1999; Hossler & Stage, 1992; Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001).

Unfortunately, there are a number of limitations within the literature that inhibit the validity of research findings. Perhaps the single largest problem within the literature on parental aspirations and expectations is in regards to the definitions, or lack of

definitions, of those terms. Many researchers have failed to define the concept being measured, oftentimes using the terms “aspirations” and “expectations” interchangeably. Additionally, the vast majority of research has relied on a single item measure of expectations and/or aspirations for educational attainment. The dearth of qualitative data on this topic also limits the extent to which researchers can understand the concepts of parental aspirations and expectations for educational attainment, as well as the process through which these beliefs are communicated to students.

The examination of parental beliefs in the context of college readiness could serve to provide a better understanding of the parental role in college readiness and success. Additionally, while empirical findings demonstrate the importance of parental aspirations and expectations in academic outcomes for students, the measurement issues within those studies limit the validity of findings. As a result of these issues, this study will seek to answer the following questions:

1. Does the *Scale of Educational Aspirations and Expectations for Adolescents (SEAEA)* demonstrate a measurable distinction between parental expectations and parental aspirations?
 - a. What is the relationship between demographic variables and parent responses to the *SEAEA*?
2. How do parents report communicating their expectations and aspirations to their child?
3. How do parents rate their knowledge and understanding of the college preparation and application process?

4. Does parent-reported college knowledge and understanding differ between parents with high expectations/aspirations and parents with low expectations/aspirations?
5. Does parent-reported knowledge and understanding of college preparation predict parental expectations and aspirations?

Chapter 2

Literature Review

The Path to College

Roughly 70% of high school seniors continue directly on to a two- or four-year college or university after graduating from high school (National Center for Education Statistics, 2008). Although this number is positive in that it indicates the majority of students are continuing their education after high school, only a third of 25- to 29-year-olds have a bachelor's degree. This percent is even more alarming when examined by ethnicity, as roughly 20% of African Americans and 12% of Latino adults between the age of 25 and 29 hold a bachelor's degree, compared to 36% of Caucasian adults in the same age range (NCES, 2008). Previous research has found that an alarming 30% of students drop out of college after their first year, with the problem of degree completion being even greater at less selective two- and four-year colleges (Education Trust, 1999; Kirst & Venezia, 2004).

College readiness. Over half of students will take remedial courses in college, bringing up the issue of high school preparation for college-level work (Kirst & Venezia, 2004). There has been a recent attempt among researchers and educators to identify the characteristics of a student who is "college ready." More contemporary definitions of college readiness extend beyond the traditional definition which utilized high school courses and grades as indicators of preparedness, and focus on the skills, content knowledge, attitudes, and contextual knowledge students need to be successful in college (Conley, 2007). In this sense, successful college students have key "habits of mind"

which help them to be successful, including problem solving and analytical skills. In addition, students who are successful in college also possess content knowledge in key areas such as writing and math, as well as the appropriate attitude and behaviors (study skills, time management, etc.). Using that updated definition of college readiness, a recent report painted a descriptive picture of what a college ready student looks like:

The college ready student envisioned by this definition is able to understand what is expected in a college course, can cope with the content knowledge that is presented, and can take away from the course the key intellectual lessons and dispositions the course was designed to convey and develop. In addition, the student is prepared to get the most out of the college experience by understanding the culture and structure of post-secondary education and the ways of knowing and intellectual norms of this academic and social environment. This student has both the mindset and disposition necessary to enable this to happen (Conley, 2007).

The components of this comprehensive definition of college readiness are supported by research which has examined predictors of college success. Within the literature, the majority of research has focused on cognitive predictors of positive college outcomes. Research has consistently demonstrated the power of standardized test scores and indicators of high school academic performance (e.g., cumulative GPA, class rank) to significantly predict first year college GPA, cumulative college GPA, and college graduation (ACT_a, 2007; Burton & Ramist, 2001; Mouw & Khanna, 1993; Pike & Saupe, 2002). The combination of “precollege characteristics” such as GPA, test scores, and high school courses has been found to explain approximately one third of the variance in freshman year grades in college (Pike & Saupe, 2002). Furthermore, the inclusion of measures of high school quality and effectiveness explained an additional 6-7% of variance in students’ freshman year GPA.

Even greater than predictors such as high school GPA and test performance, the single largest predictor of college success is the rigor student's high school coursework (Adelman, 1999; 2006). In particular, the level of mathematics a student takes in high school exerts the strongest influence on college success, with students who take high school mathematics beyond Algebra II more than doubling their chances of completing their bachelor's degree. The effects of high school courses are even greater for students of minority backgrounds. While only 45% of African American students and 61% of Latino students who enter college will finish with a bachelor's degree, those numbers are drastically increased to 73% and 79% (respectively) when students enter college having taken a rigorous high school curriculum.

More recent research regarding college readiness has shifted the focus toward noncognitive factors associated with college success. In a large meta-analysis of 109 studies, Robbins et al. (2004) examined nine noncognitive factors including achievement motivation, academic self-efficacy, and institutional commitment in relation to college performance (cumulative grades) and persistence (retention). While many of the noncognitive factors were found to have some impact on college performance and persistence, several moderate to strong predictive relationships emerged. In particular, academic goals, academic self-efficacy, and academic related skills (e.g., study skills, time management, coping strategies, etc.) were the best predictors of college persistence, while academic self-efficacy and achievement motivation were the best predictors of college performance. Further analyses revealed six noncognitive factors (academic goals, institutional commitment, social support, social involvement, academic self-efficacy, and

academic-related skills) to contribute incrementally to the prediction of college persistence, above and beyond more traditional cognitive predictors (e.g., high school GPA, test scores).

Parental Role in College Preparation

Despite the impact a rigorous high school curriculum has on college outcomes, only 18% of students nationally who took the ACT also took four years of high school math, while 59% took four years of high school English (ACT_b, 2007). Perhaps due to poor preparation, approximately 61% of students entering a two-year institution and 25% of students entering a four-year college or university completed at least one remedial course in college (NCES, 2004). Remediation of coursework results in more time between college entry and beginning college-level coursework toward a degree, as well as more money spent on credits. Additionally, students who take remedial courses are less likely to earn their degree; depending on the amount and type of remediation, 43-60% of college students quit before obtaining a degree (NCES, 2004).

Parents have the potential to play a role in preventing the threat of remediation by being active participants in their children's course selection. Recognizing that the minimum requirements for high school graduation do not necessarily mean that a student will be prepared (or even qualify) for postsecondary education is the first step. Schools should take the lead in communicating college entrance requirements and the implications of those course choices to parents and students, as well as providing information regarding options such as Advanced Placement classes and dual enrollment (Conley, 2005). Parents can help their child plan ahead so that they have the ability to

take higher level courses (such as AP or honors) later in their high school education. Additionally, parents should encourage their child to take a rigorous curriculum, complete with higher levels of mathematics and courses that will prepare them for college-level reading and writing. Parents and students can research colleges and universities together and ensure that the coursework the student is taking in high school will meet the admissions criteria.

In addition to planning for a college-preparatory high school curriculum, parents can help students to prepare for standardized tests such as the SAT and ACT. Although it is not always a school-based requirement, the ACT offers a sequence of tests to help students increase college readiness. Typically students take the EXPLORE around 8th grade, the PLAN in 10th, and the ACT in 11th/12th grade. These tests can be used to help students get information early on about their knowledge, skills, and interests so they can determine which courses they should take and gauge their progress. By going over the results, parents and students can determine where strengths and weaknesses lie, and can use that information to prepare for the ACT, which is utilized by many colleges and universities in their admission processes.

The financial planning aspect of college presents another area in which parents have the potential to be involved. The process of applying for financial aid can be daunting, and involves filling out the Free Application for Federal Student Aid (FAFSA) which is not only complicated, but also requires income and tax information from parents. A large report conducted within Chicago Public Schools demonstrated that financial planning can be a large barrier for students in the college application process.

Data indicated that of students who had been admitted to a four-year university, those who had filled out a FAFSA by May in their senior year were 50% more likely to actually enroll than students who did not complete a FAFSA (Roderick, Nagaoka, Coca, & Moeller, 2008). These findings remained true after controlling for a number of variables, including family background, social support, differences in students' qualifications, and neighborhood characteristics.

Research has demonstrated that the process of applying for financial aid is often more complex within low-income populations (Roderick et al., 2008). While the majority of parents and students regardless of SES tend to overestimate the cost of tuition, this is even more prominent within lower SES populations (Kirst & Venezia, 2004). Perhaps the first step parents can take in financial preparation for college is to work with their child to get educated about the cost of tuition at postsecondary institutions in which the student is interested. Moreover, in order to increase the chances of receiving federal, state, and institutional aid, the FAFSA needs to be filled out earlier than many may suspect (winter of 12th grade). Parents and students should thus be aware of this timeline and begin the process early.

Parental Involvement in School

More broadly, previous research has demonstrated the important role of parental involvement in education, as is evidenced by the connection to a number of student outcomes including GPA (Fan & Chen, 2001; Gutman & Midgley, 2000; Stewart, 2008), standardized achievement tests (Jeynes, 2003), student aspirations and expectations (Hill et al., 2004; Trusty, 1998), goal orientations (Gonzales, Holbein, & Quilter, 2002), and

student competence and capability beliefs (Grolnick & Slowiaczek, 1994; Juang & Silbereisen, 2002). Parental involvement can be reflected through both behavior (e.g., communication with the child about school, help with homework, etc.) and beliefs (e.g., expectations and aspirations for the child's academic achievement or educational attainment).

Parental aspirations and expectations. Several researchers (e.g., Fan & Chen, 2001; Singh, Bickley, Trivette, Keith, & Anderson, 1995) have examined parental involvement as a construct consisting of four dimensions: parent-child communication about school, home structure/supervision, parental participation in school-related activities, and parental aspirations/expectations. Of these four dimensions of involvement, research has found parental aspirations/expectations to be the dimension most strongly linked to student academic achievement. Parental aspirations and expectations had a much stronger correlation with student academic achievement than the correlation between the composite of parental involvement and academic achievement or the correlation of any other dimension of involvement and academic achievement (Fan & Chen, 2001).

Parental aspirations and expectations represent a critical role that parents have in getting their child ready for college and helping them to be successful once there. If a parent does not expect their child to go to college, it follows that they would be less likely to engage in preparatory activities such as encouraging their child to take rigorous coursework and prepare for college entrance exams, as well as assisting with the financial planning aspect. Although there appears to be little to no research that has examined

parental aspirations and expectations in conjunction with their actions toward getting their child college-ready, research has consistently demonstrated the important role of these parental beliefs in student academic outcomes. A seminal theory regarding college dropout posits that a student's family background influences the level and intensity of expectations and commitment to college that the student holds upon beginning a college degree (Tinto, 1975). A more thorough understanding of the literature regarding parental aspirations and expectations related to educational attainment would prove to be useful in ensuring that all students are ready for college.

Predictors of Parental Aspirations and Expectations

Despite a strong research base demonstrating an impact of parental expectations and aspirations on child outcomes, few studies have examined how those parental expectations and aspirations are developed and how they fit into a parent's larger belief system. Models exist for explaining parents' motivation for involvement in their child's education, recognizing the impact of parental role construction, self-efficacy, and parents' personal feelings about school (see Hoover-Dempsey & Sandler, 1995; Hoover-Dempsey & Sandler, 1997; Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005); however, there is still a need for research specifically examining the development of aspirations and expectations for their children's educational attainment.

The degree to which parents believe intelligence is alterable may impact parental aspirations and expectations for their children. Wentzel (1998) hypothesized that parents who hold entity theories of intelligence, viewing it as a stable and unchangeable trait, may hold low aspirations for their children, taking on the view that it is "hopeless" to

have high educational goals for their children because achievement is limited by IQ. Results indicated that an incremental theory of intelligence significantly predicted parental aspirations for educational attainment; parents who believed that intelligence was malleable had higher aspirations for their children's educational attainment.

In regards to parent self-efficacy, research has demonstrated that parents who believe that they can positively impact their child's education are more involved in their child's education, spending more time volunteering in the classroom and more time on educational activities with their children at home (Hoover-Dempsey, Bassler, & Brissie, 1992). Specifically related to parental aspirations as a dimension of involvement, self-efficacy was proven to positively and independently predict parental aspirations for the educational attainment of their children (Wentzel, 1998). Additional research has found that while parental education significantly predicts parental expectations for their child's educational attainment, this effect is even greater when parents report a high degree of negative self-feelings (e.g., not having much to be proud of, feeling like a failure, etc.) (Kaplan, Liu, & Kaplan, 2001). It is possible that parents who have lower levels of education and higher amounts of negative self-feelings may hold lower expectations for their children because they felt like they themselves couldn't do well and continue in school, and thus should not expect their children to continue with their education.

Socioeconomic status. Socioeconomic status has been demonstrated to be a significant predictor of parents' educational aspirations and expectations for their children (Singh et al., 1995), although some research has suggested that the impact of SES on parents' expectations and aspirations is stronger for parents of males than parents

of females (Trusty, 2002). Aside from merely utilizing household income as an indicator of SES, additional research using parental assets as an indicator of SES has demonstrated a positive and significant relationship; parents who had a higher net worth also held higher expectations for their children's education (Zhan, 2006).

In a study that sought to more thoroughly examine the impact of financial hardship on families and students, four economic groups were compared: welfare-dependent families, work-and-welfare-dependent families, working-poor families, and never-poor working families. Results indicated that compared with mothers in families who had never experienced poverty, mothers who were classified as welfare-dependent and those classified as working-poor held significantly lower aspirations for their child's educational attainment (De Civita, Pagani, Vitaro, & Tremblay, 2004).

Parent education. Parents' own educational attainment is a predictor of the expectations and aspirations they hold for their children's educational attainment. Previous research has demonstrated low to moderate correlations between parental educational attainment and parental expectations and aspirations; the more education parents have completed, the higher their expectations for their child's educational attainment (De Civita et al., 2004; Hossler & Stage, 1992). The correlation between mothers' educational attainment and expectations appears to grow stronger at higher levels of education; mothers who have a bachelor's degree have even higher expectations for their children than mothers who have some college education (Zhan, 2006).

Parental education has been demonstrated to be the single most significant predictor of parental expectations, above the influence of other variables including child's

gender, lunch subsidy, and family size; parents who graduated from high school expected their children to receive one more year of education than parents who did not graduate from high school (Gill & Reynolds, 1999). Other findings suggest that parental education predicts expectations even more strongly than household income (Davis-Kean, 2005). Additionally, even after controlling for IQ, mothers' education level significantly predicted expectations for their first grade child's eventual educational attainment (Englund, Luckner, Whaley, & Egeland, 2004).

Ethnicity. Research suggests that ethnicity is related to the educational aspirations and expectations that parents hold for their children, although the specifics of the relationship are less clear. For example, while it has been reported that Caucasian parents hold higher aspirations for their children than African American parents (Seyfried & Chung, 2002), other research has found the opposite (Spera, 2006; Wentzel, 1998). Past research has documented higher expectations and aspirations among parents of minority groups, even after controlling for SES and previous achievement (Singh et al., 1995; Cheng & Starks, 2002); despite their children's lower GPAs, parents in minority groups reported significantly higher expectations compared to Caucasian parents (Hossler & Stage, 1992). After Wentzel (1998) controlled for parental beliefs and values (e.g., self-efficacy, notions of intelligence), however, ethnicity was no longer demonstrated to be a significant predictor of aspirations.

The need to clearly identify the composition of "minority groups" and examine those ethnicities individually has been highlighted by several research findings. Goyette and Xie (1999) examined seven ethnic groups that are often categorized into the general

category of “Asian” by researchers and found a great deal of variation in parental expectations within those groups, although the expectations of European-American parents were lower than those of all Asian ethnic groups included in the study. Asian American and Asian immigrant students have also reported perceiving significantly higher parental expectations than Caucasian students, although the American-born Asian group and immigrant Asian group did not significantly differ in this study (Mau, 1997). Other research has demonstrated that the parents of immigrant teenagers hold significantly higher educational expectations for their children than do parents of second and third generation youth (Glick & White, 2004). Of the immigrant group, Asian parents held higher expectations than Latino parents.

When examining parental expectations and aspirations in terms of ideal level of educational attainment, expected level of attainment, and minimum amount of education for the parent to be satisfied, Okagaki and Frensch (1998) found that Asian parents reported significantly higher levels of desired educational attainment on all three accounts, compared to Caucasian and Latino parents. Latino parents had significantly higher minimum education levels than Caucasian; Latino parents reported that some college was necessary for them to be satisfied, while Caucasian parents reported that they would be satisfied with the completion of high school. Other research suggests that even outside of America, Asian parents (both Chinese and Vietnamese) would like and expect their children to attain significantly greater amounts of education than Caucasian parents (Dandy & Nettelbeck, 2002).

Child's gender. Parents of girls have reported significantly higher expectations regarding educational attainment, as compared to parents of boys (Gill & Reynolds, 1999; Hossler & Stage, 1992; Raty, 2006). These findings are supported by a study of student-reported perceptions of parental expectations in which girls reported that their parents held significantly higher expectations for them than boys (Mau, 1995). Raty (2006) examined parental expectations when children were in preschool and again when children were in third grade, finding that parents expected girls to attain more education than boys. Results indicated that gender differences in parental expectations could be found before children even entered elementary school, and that these differences strengthened with age.

Perhaps because most researchers have examined gender as a variable tangential to their main research questions, very little work has closely examined the relationship between child gender and parental expectations and aspirations. In a sample of African American students ages 6-16, Wood, Kaplan, and McLoyd (2007) controlled for students' previous academic achievement, and found that parents of girls still reported higher expectations than parents of boys, indicating that this gender difference is not due in part to gender differences in achievement. Additionally, the magnitude of this gender difference did not significantly change as students aged. Other research has examined the connection between parent educational attainment and gender differences in educational expectations. This study demonstrated an interaction between parental educational attainment and their child's gender, suggesting that parents who are more highly educated

hold similar educational expectations for girls and boys, while parents with less education hold higher expectations for girls than they do for boys (Raty, 2006).

Previous academic achievement. Several researchers have demonstrated a connection between previous student academic achievement and parental expectations for educational attainment. Singh et al. (1995) reported that students' previous achievement significantly predicted parental aspirations for middle school students; parents held higher aspirations for their child when their child had previously done well in school. Other research has demonstrated that student achievement as early as first grade is predictive of later parental expectations (Englund et al., 2004; Goldenberg, Gallimore, Reese, & Garnier, 2001). Unlike parental aspirations, which appeared to be unrelated to previous student achievement, parental expectations for educational attainment became increasingly linked to students' previous academic performance as students progressed through elementary school (Goldenberg et al., 2001).

Jacobs and Harvey (2005) examined the connection between parental aspirations and parental expectations for their child's educational attainment and the overall achievement level of the high school their child was attending (based on school standardized test scores). Results indicated that parents of children attending schools categorized as high achieving held significantly higher aspirations and significantly higher expectations than parents of children at schools classified as medium or low achieving. Parents of children at the high achieving schools had also maintained these aspirations and expectations significantly longer than the expectations and aspirations of parents with students attending low achieving schools; no significant difference was

found between parents of high and medium achieving schools, or between parents of medium and low achieving schools. While the results of this study are interesting and present an area for future research, the authors did not appear to control for possible confounding variables (e.g., parental education, socioeconomic status, etc.).

Summary. More research needs to be conducted to determine the process through which parents develop aspirations and expectations for their children. However, preliminary research indicates that parental beliefs about intelligence and parental self-efficacy are predictive of the aspirations and expectations they hold for their children's education. Socioeconomic status and parents' educational attainment appear to be strong predictors of the expectations and aspirations parents hold for their children. Parents who are of higher SES expect their children to obtain more education than parents who are of lower SES. Additionally, the more highly educated parents are, the higher the expectations and aspirations they hold for their children's education. Ethnicity also appears to play a role in parental expectations; parents of minority backgrounds tend to hold higher expectations for their children than Caucasian parents. Parents also tend to hold higher expectations for educational attainment for daughters than they do for sons. Lastly, children's previous school achievement also predicts parental expectations; as children progress through school, parental expectations change. Children who have a history of high achievement have parents who expect them to complete more school, while those who have a history of lower achievement have parents who expect them to complete significantly less school.

Outcomes Associated with Parental Aspirations and Expectations

Academic achievement. Although researchers have found students' previous achievement to be predictive of their parents' expectations and aspirations, the relationship appears to be bidirectional. While Goldenberg et al. (2001) did not find support for the bidirectional relationship of student achievement and parental expectations and aspirations, a number of other studies have demonstrated not only a correlation between achievement and expectations, but a predictive relationship from achievement to expectations as well.

Research has demonstrated a significant, moderate relationship between parental expectations for their child's educational attainment and the child's math ($r = .32$) and reading achievement ($r = .44$), even after controlling for maternal education and child's academic self-concept (Halle et al., 1997). Findings from a meta-analysis also indicated that parents' aspiration and expectation for their children's achievement had a moderate, positive relationship with students' actual academic achievement (Fan & Chen, 2001). Additionally, adolescents' perceptions of their parents' aspirations were significantly and moderately correlated with their current grades in school; the students who had better grades reported that their parents had higher aspirations for their future educational attainment (Spera, 2006).

Parental expectations for their children's educational attainment have been demonstrated to strongly predict academic achievement. Parental expectations for educational attainment positively predicted students' achievement test scores (Benner & Mistry, 2007; Neuenschwander, Vida, Garret, & Eccles, 2007; Singh et al., 1995; Zhan,

2006), as well as GPA (Seyfried & Chung, 2002). Additionally, both parent reported and students' perceived parental aspirations have had a demonstrated significant effect on students academic growth across a variety of subjects and after controlling for SES (Fan, 2001). Mothers who held higher educational aspirations and wanted their child to compete more education also protected against academic problems, significantly reducing the risk of academic failure (defined as not being in an age-appropriate classroom at age 12) by 48% (De Civita et al., 2004).

Gill and Reynolds (1999) examined both parent reported expectations for their child's educational attainment, as well as children's perceived parental expectations for their achievement. While parent reported expectations for educational attainment was a significant predictor of math and reading achievement, children's perceptions of their parents' expectations for their achievement proved to have a very meaningful role in their sixth grade math and reading achievement. Children's perceptions of expectations had a strong and statistically significant impact on both math and reading achievement, with effect sizes of .28 and .33, respectively. Children who reported higher parental expectations to do well in school received higher scores on both reading and math standardized tests.

While parental expectations for educational attainment alone has been shown to be a significant predictor of academic achievement, the length of time that parents report having held those expectations may also be a critical variable. When taken together, parent expectations for their children's educational attainment and the length of time they

had held those expectations accounted for 24% of the variance in student achievement (Jacobs & Harvey, 2005).

African American parents of who had higher expectations of educational attainment significantly affected their high school student's reading achievement ($d = .67$) (Flowers & Flowers, 2008). Additionally, a meta-analysis found that African American parents' expectations for the academic success of their child had a significant effect on their overall academic achievement, yielding an effect size of .57 (Jeynes, 2003). Interestingly, Seyfried and Chung (2002) found an interaction between parental expectations for educational attainment and ethnicity. The interaction model indicated that African American and Caucasian students who had the same level of parental expectations have different GPAs; African American students received lower GPAs. It is possible that the positive impact of parental expectations may be lessened for African American students due to a greater number of life stressors or more negative experiences with schooling.

Other research has also indicated that parental aspirations affect student academic achievement differently depending on ethnicity. While parental aspirations for educational attainment had no effect on student achievement for Hispanic students, it had a direct and short term effect on achievement for Asian and African American students. For Caucasian students, parental aspirations had a direct effect on both short and long term achievement (Hong & Ho, 2005). For all groups of students, parental aspirations affected both short and long term achievement indirectly through student aspirations.

Student beliefs. While parent expectations and aspirations directly affect student achievement, they also play an important part in students' development of their own beliefs and expectations. Research has demonstrated that parental aspirations and expectations significantly predict student expectations and aspirations (Benner & Mistry, 2007; Goyette & Xie, 1999; Hossler & Stage, 1992; Jodl et al., 2001). Adolescents whose mothers expected them to continue their education further had significantly higher expectations for themselves to continue their education (Benner & Mistry, 2007). Fathers' expectations for their adolescent child's educational attainment also significantly predicted students' own aspirations ($\beta = .30$) (Jodl et al., 2001). Additional research has demonstrated that parental expectations significantly predict student expectations in the same way for both students with and without disabilities, demonstrating the critical role of parental expectations for both student populations (Patrikakou, 1996).

Parental aspirations and expectations also have some long term implications for student beliefs. Parental aspirations for their child's educational attainment when students were 11, were significantly and moderately correlated with students' self-reported aspirations at age 16; the higher parents' aspirations were when students were 11, the higher students reported their own aspirations were at age 16 (Marjoribanks, 1995). Educational expectations of African American parents when students were in eighth grade significantly and positively predicted students' own educational expectations when they were two years out of high school. This effect was significant for both genders, although it was larger for women ($\beta = .25$) than for men ($\beta = .14$) (Trusty, 2002).

In addition to the connection to students' own expectations and aspirations, parental aspirations for their child's educational attainment have been demonstrated to be connected to students' capability beliefs regarding academics. Parent aspirations significantly and positively predicted student-reported capability beliefs ($\beta = .21$). Parents who had higher aspirations had children who had higher capability beliefs in sixth grade, which in turn predicted higher grades in ninth grade (Juang & Silbereisen, 2002). Additionally, youth who had parents with higher expected levels of educational attainment reported significantly higher levels of self-competency beliefs for reading and math (Benner & Mistry, 2007).

Educational attainment. While the lack of longitudinal data examining the effects of parental expectations and aspirations beyond high school is notable, research has indicated that students' own expectations and aspirations for their educational attainment are predictive of their actual educational attainment (Andres, Adamuti-Trache, Yoon, Pidgeon, & Thomsen, 2007; Marjoribanks, 2003; 2005). Because parents' aspirations and expectations have been demonstrated to predict students' aspirations and expectations, it follows that a relationship (either indirect or direct) between parents' aspirations and expectations and students' educational attainment would be worth examining in future research.

Glick and White (2004) followed participants two years after their expected high school graduation to examine the role of family variables on post-secondary enrollment. Results from a multiple regression analysis indicated that parental expectations significantly predicted post-secondary enrollment. Even after controlling for previous

academic achievement and family resources, students whose parents held high expectations for them were more likely to graduate high school and continue their education in college than students whose parents held low expectations for them.

Summary. Research utilizing both parent reports of expectations, as well as children's perceptions of those expectations, has demonstrated the critical role of expectations in student achievement. Parental expectations for educational attainment have been demonstrated to be predictive of students achievement test scores, GPA, and individual course grades. Several researchers have found evidence that the impact of aspirations and expectations varies by student ethnicity, with aspirations and expectations exerting a stronger influence on the achievement of Caucasian students. Parental aspirations and expectations also have been demonstrated to be significantly predictive of students' own aspirations and expectations for themselves; children with parents who hold high expectations for them have significantly higher expectations for themselves than children whose parents hold low expectations. Additionally, parents who have high aspirations for their children appear to have children who have higher capability beliefs for themselves. Lastly, parental expectations for the educational attainment of their children is significantly predictive of their child's later enrollment in post-secondary education.

Critique of the Literature

In order to draw meaningful and legitimate conclusions from research studies, an examination of the construct and its theoretical indicators is warranted. This process of construct validation is concerned with the "validity of inferences about unobserved

variables (the constructs) on the basis of observed variables (their presumed indicators),” and is no doubt full of challenges and ambiguities (Pedhazur & Schmelkin, 1991, p. 52). One particular approach to construct validation, *logical analysis*, involves thinking critically about the definition of the construct, the method of measurement, the items, etc. This approach will be employed in the following section to examine the literature surrounding parental aspirations and expectation for educational attainment.

Definition of the construct. It perhaps does seem logical to begin the examination of construct validity by thoroughly examining the definitions of the construct. Perhaps the single largest problem within the literature on parental aspirations and expectations is in regards to the definitions, or lack of definitions, of those terms. Researchers vary in their use of the terms expectation and aspiration, with some researchers making an explicit distinction between the two (e.g., Goldenberg et al., 2001) and others using the terms interchangeably (e.g., Hossler & Stage, 1992; Mau, 1995).

Many researchers examining expectations and/or aspirations do not operationalize the terms, making it difficult to determine if the item(s) employed to measure the construct are actually representative of that construct. When no definition is provided, and the only way of understanding the author’s conceptualization of “expectation” or “aspiration” is through the item provided in the Method section, it makes it exceedingly difficult to validate that the item is in fact a representative of a larger construct. Even when the construct to be measured is defined, the construct may not be clarified, as is the case in a study by Singh et al. (1995), who defined aspirations in the literature review as

“how much education parents expect their children to complete” (p.300), thus combining aspirations and expectations into a single concept.

Glick and White (2004), however, made a clear distinction between aspirations and expectations, arguing that expectations reflect “respondents’ understandings of what is possible based on their own resources and their perception of external barriers to educational attainment” (p. 278), while aspirations are less concrete. The authors made it clear that the construct measured in their study was expectations. Goldenberg et al. (2001), also clearly defined the terms they intended to measure in their study, characterizing expectations as realistic goals and aspirations as ideal goals. Trusty (2002) made a similar distinction, classifying aspirations as representing “a more abstract, ideological goal or hope,” while expectations as reflecting “a more concrete or realistic plan” (p. 332), in turn noting that he would only be measuring expectations.

An additional problem arises in that parents may hold aspirations and expectations for their children in a number of areas, including expectations for behavior, academic achievement, educational attainment, occupational attainment, athletic performance, family/marriage, etc. These aspirations and expectations are not necessarily comparable, and thus expectations and aspirations should be *explicitly* labeled in research studies to avoid confusion. For example, Gill and Reynolds (1999) compared parents’ and children’s expectations; however, the expectation captured by the parent item was in reference to educational attainment, while the expectation captured by the child item was in reference to academic achievement. These two questions are undoubtedly measuring

different types of expectations, and should not be casually compared as if the child and parent reports are in reference to the same type of expectation

Item content. Pedhazur and Schmelkin (1991) asserted that in order for items to function as adequate indicators of the construct, they need to be written or selected in a manner that is guided by the definition of the construct. The lack of clarity regarding definitions of the terms expectations and aspirations, as well as the ambiguity regarding the distinctions between the two, has likely contributed to the confusion within the selection and wording of items intended to capture expectations or aspirations (See Appendix A). An excellent example of this confusion is illustrated by the use of the question, “How much education do you want your child to achieve?”. Several researchers have identified the previous item as representing “expectation” (e.g., Mau, 1997), while others have labeled it “aspiration” (e.g., Hong & Ho, 2005).

Goldenberg et al. (2001) asked parents a question referencing expectations (“How far do you think your child will go in formal schooling?”) and a question referencing aspirations (“How far do you want your child to go in formal schooling?”). It should be noted that parents were interviewed and asked these questions in Spanish. The results of this six-year longitudinal study indicated that parents were able to distinguish *want* (i.e., aspirations) from *think* (i.e., expectations). At all grade levels (K-6), parents’ expectations of their child attending college was lower than their aspirations for their child attending college. Specifically, the range over the years of parents expecting their child to attend college was 35-59%, while the range of parents aspiring for their child to go to college was 83-93% over the course of the six-year study. Additionally, aspirations were

demonstrated to be stable and generally unrelated to achievement, while child performance predicted expectations.

Other authors have varied their wording in an attempt to reflect their definition of expectations as attainable or realistic and aspirations as a hope. For example, Jacobs and Harvey (2005) made a distinction in their two questions, using the words “really desire” to reflect aspirations and “really expect” to reflect expectations. Jodl et al., (2001) asked parents how far they would like their child to go in school, as well as how far their child would *actually* go. Several authors (e.g., Halle et al., 1997) have employed a probability scale in order to assess expectations, asking parents to rate the likelihood that their child would complete various levels of schooling (ranging from 6th grade to college).

Okagaki and Frensch (1998) asked three distinct questions in an attempt to differentiate aspirations and expectations. Parents were asked to rate the ideal amount of education they would like their child to attain, as well as how much education parents actually expected. Parents in this study were also asked to report the very least amount of education they would be satisfied with their children attaining. Findings indicated a distinction between the ideal and expected levels of educational attainment, as ideal levels were higher for all three ethnic groups included (Caucasian, Latino, and Asian).

The item response sets regarding expectations and aspirations for educational attainment utilized in the reviewed studies may also be problematic. Options provided for the amount of education expected or aspired vary from 4-item to 12-item response sets. The lowest option for the amount of educational attainment ranges from 9th grade (e.g., De Civita et al., 2004) to *high school graduation* (e.g., Gill & Reynolds, 1999), while the

highest option for the amount of educational attainment ranges from *attend a 4-year college* (e.g., Patrikakou, 1996) to *MD, JD, or PhD* (e.g., Davis-Kean, 2005). The selection of items appear to reflect a certain degree of bias from the researcher, as utilizing *high school graduation* as the lowest option of educational attainment implies that parents would not expect or aspire for their child to earn any less education than a high school diploma.

Measurement procedures. Within the literature, it appears that the vast majority of research on aspirations and expectations reflects parents' responses to survey items. Pedhazur and Schmelkin (1991) emphasized that "the validity of a measure is adversely affected to the extent to which the obtained scores are due to the specific measurement procedure used." (p. 62). Measurement procedures should be selected with the research questions in mind. For example, an interest in examining the connection between parental expectations and child academic achievement may utilize child perceptions of expectations, as it might be hypothesized that it is not parents' actual expectations of their children that influence achievement, but rather how children perceive or interpret those expectations. Conversely, if a researcher was interested in examining the connection between parental expectations for their child's educational attainment and parental self-efficacy, it would be wise to examine parents' own reports of expectations.

The use of a single method to measure a construct opens the door to a variety of threats to validity, including biases due to participant reactions to researcher expectations, unclear item wording, research settings, etc. (Pedhazur & Schmelkin, 1991). While the use of survey items to measure a construct is time and cost-efficient, utilizing survey

items alone may not be sufficient to establish a distinction between aspirations and expectations. First, parents (or children for that matter) may not be able to understand the difference between *want* and *expect* upon simply reading a survey question. Additionally, more data may be collected through focus groups, for example, than perhaps would be gleaned from surveys alone. However, surveys provide a degree of anonymity that focus groups or interviews would not, thereby allowing parents to freely answer questions regarding their expectations for their children without feeling that it will somehow reflect poorly on them if those expectations are low.

Goldenberg et al. (2001) utilized interviews over the course of their longitudinal study. The interview format allowed for parents to expand on their expectations and aspirations, painting a better picture of parental beliefs. Several parents appeared to link their expectations for their children to the child's interest in school, taking into account children's motivation and academic behavior (e.g., homework) as indicators of that interest. Additionally, parents discussed other factors that influenced their expectations for their child's educational attainment, including economic resources, negative peer groups, parents' perceived ability to support students with school work, school performance of siblings or other relatives, and parents' own experiences with school and work. Because of the free response format of interviews, the researchers likely obtained more rich data than they would have by simply asking parents to respond to a few questions on a survey.

Scoring procedures. Due to the difference in parental reports of expectations and aspirations, it is unfortunate that several researchers who utilized two-item measures of

aspirations/expectations did not elect to analyze the items separately, but rather used them to create a composite. For example, Jodl et al. (2001) asked parents, “How far would you like your child to go in school?” and “How far will your child actually go in school?”. However, when the data were analyzed, “educational expectations/aspirations” was used as a single variable. Seyfried and Chung (2002) examined “parent expectations of schooling;” however, one of the two items used to measure this variable appears to reflect aspirations (“How much schooling would you like your child to get eventually?”). Similarly, Singh et al. (1995) examined “parental aspirations for their children’s education” using two items, one of which seems to reflect expectations (“How far in school do you expect your child to go?”).

It is clear from the combination of items seemingly reflective of both aspirations as well as expectations, that many researchers in the field do not view aspirations and expectations as different and unique. This all relates back to the problem of unclear definitions and the failure to operationalize terms. Listed below are a set of proposed definitions for aspirations and expectations, in the hopes that the distinctions between the two terms may be clarified.

Aspirations defined. The definition of “aspire” is to have a great ambition or an ultimate goal. Aspirations should be thought of as an ultimate, best case scenario goal or ambition. This means that aspirations may be more abstract, not necessarily reflecting attainable goals grounded in reality. Therefore, aspirations may stay more stable over time, not changing based on student achievement, interest in school, or students’ own aspirations. For example, a parent whose son is failing high school and is on the verge of

dropping out, may still aspire or wish for him to continue with his education and become a doctor.

Expectations defined. To “expect” may be defined as to consider likely or certain. In this respect, expectations may be thought of realistic and attainable goals. Glick and White (2004) defined expectations as beliefs that “reflect not only a hope, no matter how fervent, but also some genuine element of prediction and commitment.” (p. 278). Because of this aspect of realism, expectations may change over time based on student struggles and successes, interest and apathy. For example, the same parent mentioned earlier who aspires for his son to become a doctor may modify that goal, based on his son’s struggle in school and interest in other occupations.

Summary

Researchers have demonstrated the significant and multifaceted influence of parental expectations and aspirations for their child’s educational attainment. While there has yet to be much research examining the development of parental aspirations and expectations, a number of variables serve as predictors, including parental educational attainment, child’s previous achievement, socioeconomic status, and ethnicity. High parental aspirations and expectations for their children’s educational attainment positively and significantly impact student academic achievement in the form of grades, standardized tests, and academic growth. Additionally, these expectations and aspirations are also predictive of students’ expectations and aspirations, which have demonstrated to be connected to achievement and actual educational attainment.

Unfortunately, the majority of research findings should be interpreted with caution, as there appears to be much ambiguity within the field regarding the terms “aspiration” and “expectation.” Currently, the major problems in the literature exist due to the lack of clear operational definitions of expectation and aspiration. Researchers have often neglected to define the variable they hope to measure, in turn making research findings less useful and valid. The use of single-item measures also limits the extent to which the concepts of aspirations and expectations can be understood and applied.

In order to address a main component of college readiness (having college as a goal in the first place), we first must understand the types of goals parents hold for their children’s education. Do parents hold ideal goals (aspirations) for their child’s education that are different than the realistic goals (expectations) that they hold? Do these beliefs interact differently with a parent’s college knowledge? The next chapter will discuss the method used to begin to clarify the concepts of parental expectations and aspirations.

Research Questions

This study was guided by the following research questions:

1. Does the *Scale of Educational Aspirations and Expectations for Adolescents (SEAEA)* demonstrate a measurable distinction between parental expectations and parental aspirations?
 - a. What is the relationship between demographic variables and parent responses to the *SEAEA*?
2. How do parents report communicating their expectations and aspirations to their child?

3. How do parents rate their knowledge and understanding of the college preparation and application process?
4. Does parent-reported college knowledge and understanding differ between parents with high expectations/aspirations and parents with low expectations/aspirations?
5. Does parent-reported knowledge and understanding of college preparation predict parental expectations and aspirations?

Chapter 3

Method

Participant

Participants in this study consisted of 598 parents of students at two middle schools and three high schools, spanning three suburban school districts outside of a large metropolitan area in the Midwest. The majority of parents had students in 9th or 10th grade (43.6% and 41.8%, respectively), with a smaller percentage of parents having students in 8th grade (14.6%). All schools included in this study were participating in the development stage of a college readiness program. At the point of data collection, none of the schools had implemented a parent component to the college readiness program.

Data were collected on parent education level and children's grades, as previous research has demonstrated the connection of those variables to parental aspirations and expectations. Complete information regarding these characteristics for the participating parents is reported in Table 1. In general, participants demonstrated a range of education levels, although the distribution is slightly skewed, with more parents of higher education than lower education levels represented in the sample. Additionally, a range in student academic achievement was found in the sample. Although the majority of parents in the sample reported that their students received mostly A's and B's, this sample was representative of the schools in that the majority of students in these schools received high grades and only a small percentage received D's and F's. Perhaps due to the sensitive nature of these two questions, roughly three percent of parents elected not to answer them.

Table 1

Demographic Information

	<i>N</i>	Percentage
Parent Education		
Some High School	4	0.7
Diploma or GED	52	9.1
Some College	95	16.6
2-year Degree	142	24.9
4-year Degree	196	34.3
Graduate Degree	81	14.2
Child's Academic Grades		
Mostly A's	203	35.4
A's and B's	220	38.4
B's and C's	113	19.7
C's and D's	30	5.2
D's and F's	7	1.2

Measures

Scale of Educational Aspirations and Expectations for Adolescents (SEAEA). This scale was developed based on an extensive review of the literature surrounding parental expectations and aspirations for the educational attainment of their child. (See Appendix B). No other scales were found that incorporated multiple items reflecting both expectations and aspirations; previous research has relied on single-item measures of

these constructs. The scale was designed with the intention of determining whether or not aspirations and expectations can be differentiated through survey items. Using the definitions of aspirations and expectations garnered from the literature (see p 33-34), items were created to reflect both ideal goals (aspirations) and realistic goals (expectations) that parents hold for their child's educational attainment. The 29 items developed were set on a four-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

Additional questions and demographics. Parents were also asked to answer five basic questions regarding their knowledge of college readiness (application processes, financial aid, high school coursework, etc.). These questions were selected based on common goals of parent involvement programs and college preparatory workshops. Parents also were asked to answer a few basic questions regarding their child's age and academic performance, as well as their own educational attainment. Parents were asked to mark the highest amount of education they "realistically expect" as well as the highest amount of education they "ideally would like" for their child to achieve. Last, parents were asked to provide additional information regarding the ways in which they communicate their expectations to their children. (See Appendix C).

Procedures

The survey was piloted with a small group of 15 parents of 8th and 9th grade students in one of the participating school districts. Both mothers and fathers were included in the pilot and their children varied from low to high achieving. After parents completed the survey, a small focus group was conducted to discuss the survey. A few

minor changes were made to the wording of a few survey items based on feedback from the parents. In addition, parents contributed a few new options to the question regarding ways parents communicate expectations.

All schools indicated that the vast majority of parents have access to computers, as email is a main method of communication between teachers and parents. Parents were emailed a link to the survey initially by a counselor or administrative assistant. Parents received three follow-up emails, with at least one of those being from the school principal. For schools that had a newsletter, information regarding the survey was included which directed parents to a link on the school's website. Additionally, several schools utilized an automated phone message system to call parents; the recorded message was from the principal and included information about the survey and instructed parents to go to the school website to find the link to the survey. Of the parents who were reached through these methods, approximately 27% elected to participate in the survey.

To create multiple ways for parents to access the survey, paper copies were also available at each school's parent-teacher conferences and/or registration nights. Counselors across the schools indicated approximately 65-95% attendance at these events. As an incentive for parents to complete the survey, they were asked to enter their names in a drawing, with the winner receiving \$50 of books donated to their child's school in their name.

Plan of Analysis

To address the first research question and determine whether the *SEAEA* demonstrates a measurable distinction between parental expectations and aspirations, an

exploratory factor analysis was conducted using principal axis factoring. Parental responses to the *SEAEA* also were analyzed by demographics, including parent education level, student academic achievement, and student grade in school. Next, to address the second question and examine how parents communicate their expectations and aspirations to their children, frequencies were conducted for the parent responses to the twelve strategies of communication provided as options on the survey. Open-ended responses to the survey question asking parents to list any strategies they use to communicate their expectations also were coded and organized into themes.

The third question, which sought to examine parental college knowledge and understanding, was answered through a frequency analysis of the five questions on the survey that pertain to college knowledge. This knowledge also was examined as a function of student grade in school, parent education level, whether or not the parent already had a child in college, and student academic achievement. To determine whether or not differences in college knowledge and understanding exist between parents of different levels of expectations (question four), a MANCOVA was conducted to look for group differences between parents with high and low expectations on the college knowledge questions. To answer the last question and determine whether parental college knowledge is predictive of parent expectations, a multiple regression was employed using the five college knowledge questions as predictor variables in a model.

Chapter 4

Results

Research Question 1: Measurable Distinction between Expectations and Aspirations

In order to determine if the *SEAEA* demonstrated a measurable distinction between parental expectations and aspirations for their children's educational attainment, an exploratory factor analysis was conducted using principal axis factoring. While some researchers have used the criterion of Eigenvalues greater than one for determining the number of factors to retain, others have suggested the use of Scree plots in addition to relying solely on Eigenvalues (Kline, 1994). While the use of Eigenvalues indicated that four factors should be retained, the Scree plot suggested the possibility of a five factor model (Figure 1). Thus, separate factor analyses were conducted for both the four and five factor models. For each iteration, a Varimax rotation was employed, and items with loadings less than .40 were removed (Netemeyer, Bearden, & Sharma, 2003).

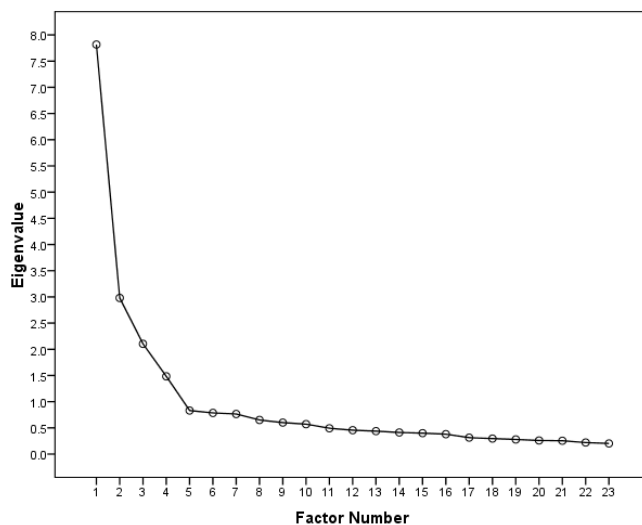


Figure 1. Scree Plot for Exploratory Factor Analysis of the *SEAEA*.

Accounting for 62.5% of the variance, the four-factor model resulted in 23 items with factor loadings higher than .40 and provided the best defined factor structure for the data in terms of the strength of factor loadings and interpretability. The model consisted of the following factors:

- Expectations and Valuing of Education (items 1, 2, 3, 4, 8, 10, 11, 12, 16)
- Preparation for Educational Attainment (items 21, 22, 23, 24, 26, 27, 28)
- Stability of Expectations and Aspirations (items 6, 7, 13, 25)
- Congruency for High Educational Attainment (items 9, 14, 15)

Six items (5, 17, 18, 19, 20, 29) had factor loadings less than .40 and were thus excluded from the model. Factor loadings for items comprising the four-factor model may be found in Table 2. Scale reliability for the *SEAEA* was high ($\alpha = .84$), as was reliability for each of the four factors ($\alpha = .90$, $\alpha = .84$, $\alpha = .90$, $\alpha = .76$, respectively).

Table 2

Factor Loadings of the SEAEA

Item	Factor			
	1	2	3	4
I hope my child will continue his/her education after high school.	.723	.095	-.014	.005
My child is aware of my ideal educational dreams for him/her.	.624	.282	-.004	.106
In a perfect world, my child would graduate from college.	.816	.093	-.056	.098
I have great ambitions for my child's education.	.587	.317	-.030	.183
As things stand now, I realistically expect my child to continue his/her education after high school.	.606	.345	-.192	.184
My child is aware of my educational expectations for him/her.	.621	.389	-.044	.150
It is a realistic goal for my child to graduate from college.	.588	.383	-.253	.232
I would love for my child to graduate from college.	.778	.057	-.009	.065
I believe that a college education is important for my child's future.	.650	.235	-.101	.076
I believe that the educational goals I hold for my child will influence his/her own educational goals.	.241	.468	-.089	.088
I help my child choose courses that will prepare him/her for college.	.165	.668	-.110	.087
I encourage my child to research various colleges and universities.	.142	.632	.020	.095
I have told my child that I expect him/her to go to college after high school.	.479	.495	-.087	.059
I regularly talk to my child about his/her educational plans for after high school.	.210	.611	.052	.113
I encourage my child to take classes that will challenge him/her.	.281	.590	-.119	.266

Item	Factor			
	1	2	3	4
I have helped my child plan how he/she will get into college.	.116	.726	-.070	.162
My hopes and dreams for my child's education have changed as he/she got older.	-.089	-.049	.766	-.019
Over the years, my ideal hopes and dreams for my child's education have changed due to his/her academic performance school.	-.041	-.039	.829	-.058
Over the years, my realistic expectations for my child's education have changed due to his/her academic success in school.	-.063	-.058	.833	-.078
My expectations for my child's education have changed as he/she got older.	-.072	-.090	.864	.003
I dream of my child obtaining an advanced degree (MA, JD, MD, PhD).	.231	.170	.091	.606
I know my child will do well on college entrance exams (ACT, SAT).	.143	.278	-.200	.523
I think it is likely that my child will obtain an advanced degree (MA, JD, MD, PhD).	.067	.174	-.083	.963

Note: *Factor 1*= Expectations and Valuing of Education; *Factor 2*= Preparation for Educational Attainment; *Factor 3*= Stability of Expectations and Aspirations; *Factor 4*= Congruency for High Educational Attainment

The first factor, *Expectations and Valuing of Education*, was comprised of items thought to reflect parental educational expectations and aspirations, as well as items that reflected parents' valuing of education. The second factor, *Preparation for Educational Attainment*, consisted of items that are action-oriented and more largely representative of parent involvement. These items included actions such as encouraging the child to research colleges and helping the child plan how he/she will get into college. Items reflecting a change in educational expectations and aspirations due to academic performance or age all loaded on the same factor: *Stability of Expectations and Aspirations*. Lastly, items reflecting a *Congruency for High Educational Attainment* included parental goals of their child receiving a graduate degree, as well as believing the child would excel on standardized tests such as the SAT or ACT.

All four factors were significantly correlated ($p < .001$); the correlation sizes ranged from small to moderately high (see Table 3). The highest correlation ($r = .603$) was between Expectations and Valuing of Education and Preparation for Educational Attainment; parents who had the highest expectations and educational goals for their children were also doing more to prepare their children for college. An interesting, albeit weak, correlation existed between Expectations and Valuing of Education and Stability of Expectations and Aspirations; parents who had high expectations also tended to report greater stability of those beliefs over time.

Table 3

Intercorrelations between Factors for the SEAEA

	1	2	3	4
Expectations and Valuing of Education	--	.603**	-.212**	.386**
Preparation for Educational Attainment		--	-.181**	.419**
Stability of Expectations and Aspirations			--	-.138**
Congruency for High Educational Attainment				--

** $p < .001$

Complete descriptive data for individual items of the *SEAEA* may be found in Table 4. Of all four factors, Expectations and Valuing of Education had the highest mean ($M = 3.71$), indicating that the vast majority of parents agreed or strongly agreed with statements such as, “I hope my child will continue his/her education after high school.” Approximately 99% of parents agreed or strongly agreed that they hoped their child would continue his/her education after high school and 97% of parents reported that they believe that is a realistic goal. Additionally, 98% of parents reported that they believed a college education is important to their child’s future. The mean for Preparation for Educational Attainment ($M = 3.26$) indicates that most parents reported helping their child with academic tasks, encouraging their child to research colleges and universities, and telling their child that they are expected to continue their education after high school. Although they reported engaging in a number of college preparatory activities with their children, approximately 20% of parents reported that they have not helped their child plan how he/she will get into college. With a mean of 2.18, it appears that most parents

reported that did not change over time. In addition, many parents reported a Congruency for High Educational Attainment ($M= 2.94$).

Table 4

Descriptive Data for SEAEA Items

	Strongly Disagree	Disagree	Agree	Strongly Agree	<i>M</i>	<i>SD</i>
<i>Expectations and Valuing of Education</i>						
I hope my child will continue his/her education after high school.	0.5%	0.2%	13.4%	85.9%	3.85	.40
My child is aware of my ideal educational dreams for him/her.	0.8%	2.2%	31.7%	65.3%	3.61	.58
In a perfect world, my child would graduate from college.	0.3%	1.3%	17.7%	80.6%	3.79	.47
I have great ambitions for my child's education.	0.2%	1.9%	32.2%	65.8%	3.64	.53
As things stand now, I realistically expect my child to continue his/her education after high school.	0.5%	0.5%	16.9%	82.1%	3.81	.58
My child is aware of my educational expectations for him/her.	0.8%	2.0%	25.6%	71.5%	3.68	.52
It is a realistic goal for my child to graduate from college.	0.2%	1.5%	32.5%	65.8%	3.64	.57
I would love for my child to graduate from college.	0.3%	3.6%	27.2%	68.9%	3.65	.45
I believe that a college education is important for my child's future.	0.0%	1.7%	22.5%	75.8%	3.74	.48

	Strongly Disagree	Disagree	Agree	Strongly Agree	M	SD
<i>Preparation for Educational Attainment</i>						
I believe that the educational goals I hold for my child will influence his/her own educational goals.	1.5%	7.1%	59.0%	32.3%	3.22	.64
I help my child choose courses that will prepare him/her for college.	1.2%	6.8%	58.6%	33.4%	3.24	.63
I encourage my child to research various colleges and universities.	2.2%	9.4%	56.8%	31.6%	3.18	.68
I have told my child that I expect him/her to go to college after high school.	0.5%	8.7%	36.1%	54.8%	3.45	.67
I regularly talk to my child about his/her educational plans for after high school.	0.2%	9.5%	52.5%	37.9%	3.28	.64
I encourage my child to take classes that will challenge him/her.	0.3%	4.7%	52.6%	42.3%	3.37	.59
I have helped my child plan how he/she will get into college.	0.7%	19.7%	53.6%	26.0%	3.05	.69
<i>Stability of Expectations and Aspirations</i>						
My hopes and dreams for my child's education have changed as he/she got older.	20.4%	47.6%	22.3%	9.7%	2.21	.88
Over the years, my ideal hopes and dreams for my child's education have changed due to his/her academic performance school.	20.9%	49.2%	20.8%	9.1%	2.18	.87

	Strongly Disagree	Disagree	Agree	Strongly Agree	<i>M</i>	<i>SD</i>
Over the years, my realistic expectations for my child's education have changed due to his/her academic success in school.	21.0%	49.1%	22.5%	7.4%	2.16	.84
My expectations for my child's education have changed as he/she got older.	18.2%	51.4%	24.7%	5.8%	2.18	.79
<i>Congruency for High Education</i>						
I dream of my child obtaining an advanced degree (MA, JD, MD, PhD).	1.2%	31.3%	39.0%	28.4%	2.95	.80
I know my child will do well on college entrance exams (ACT, SAT).	1.7%	14.0%	56.2%	28.0%	3.11	.69
I think it is likely that my child will obtain an advanced degree (MA, JD, MD, PhD).	3.1%	36.5%	43.4%	17.0%	2.74	.77

Although items reflecting expectations and aspirations were highly correlated and thus did not load onto separate factors, further analyses revealed an apparent distinction between the two. The means between items reflecting aspirations were significantly higher than the means for items reflecting expectations. For example, parents agreed at significantly higher rates with the statement, “I hope my child will continue his/her education after high school.” than they did with the statement, “I realistically expect my child to continue his/her education after high school.” ($t= 8.19, p < .001$). Additionally, significantly more parents agreed with the statement, “In a perfect world, my child would graduate from college.” than the statement, “It is a realistic goal for my child to graduate from college.” ($t= 6.39, p < .001$).

In addition to the items on the *SEAEA* that focused on educational attainment, parents were also asked to indicate the highest amount of education that they “realistically expect” their child to attain, as well as the highest amount of education that they would “ideally like” their child to attain (see Table 5 for frequencies). A t-test was conducted and indicated that parents gave different answers to these two questions; the level of ideal educational attainment (aspiration) was significantly higher than the level of expected educational attainment ($t= 14.10, p < .001$).

Table 5

Frequencies for Realistic and Ideal Educational Attainment Goals

	Expected Level		Ideal Level	
	<i>N</i>	%	<i>N</i>	%
High School	7	1.2	0	0.0
Some College	12	2.1	2	0.3
2-year College or University	67	11.7	27	4.7
4-year College or University	384	66.9	285	49.8
Graduate School	97	16.2	247	43.2
I don't know.	7	1.2	10	1.7

Responses to the SEAEA by Demographics. A series of one-way ANOVAs were conducted in order to determine if there were differences for Expectations and Valuing of Education, Preparation for Educational Attainment, Stability of Expectations and Aspirations, and Congruency for High Educational Attainment by parental education level, student academic achievement, and student grade in school. Due to the number of analyses being performed, a Bonferonni corrected alpha of .01 was utilized to control for error. There were no significant differences on any of the four factors of the *SEAEA* between parents of students in 8th, 9th, or 10th grade. Descriptive statistics for the *SEAEA* by student grade in school may be found in Table 6.

Table 6

SEAEA Factors Means by Student Grade in School

	Exp. and Valuing			Prep. for Ed. Attain.			Stability of Exp.			Congr. for High Ed.		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Grade 8	82	3.70	.38	82	3.21	.49	82	2.15	.72	81	2.95	.68
Grade 9	244	3.73	.38	242	3.26	.45	242	2.17	.72	237	2.92	.60
Grade 10	231	3.71	.38	233	3.29	.46	233	2.16	.74	220	2.96	.61

Results indicated a significant relationship between parental education level and Expectations and Valuing of Education ($F(5, 561) = 8.50, p < .001, \eta^2 = .070$); parents who had more education had higher means for this factor. Significant results were also found for Preparation for Educational Attainment ($F(5, 561) = 9.93, p < .001, \eta^2 = .081$) and Congruency for High Educational Attainment ($F(5, 543) = 3.72, p < .01, \eta^2 = .033$). Parents with higher levels of educational attainment reported higher degrees of Preparation for Educational Attainment and greater Congruency for High Educational Attainment. Significant results were not found between parents of different levels of education for Stability of Expectations. Descriptive statistics for the *SEAEA* by parent education level may be found in Table 7.

Results also indicated a significant relationship between Expectations and Valuing of Education and student academic achievement ($F(4, 565) = 18.63, p < .001, \eta^2 = .117$); parents of students who received higher grades had higher means for this factor. Preparation for Educational Attainment was also significantly influenced by student academic grades ($F(4, 564) = 16.16, p < .001, \eta^2 = .103$), as was Stability of Expectations ($F(4, 565) = 10.12, p < .001, \eta^2 = .067$). Parents of students with high academic achievement were more likely to report greater amounts of Preparation for Educational Attainment. Additionally, parents who had children with lower academic achievement were more likely to report that their expectations and aspirations for their child had changed. Lastly, significant results were also found for Congruency for High Educational Attainment ($F(4, 547) = 34.05, p < .001, \eta^2 = .199$); parents of students with higher grades

had higher means on this factor. Descriptive statistics for the *SEAEA* by student academic performance may be found in Table 8.

Table 7

SEAEA Factor Means by Parent Education Level

	Exp. and Valuing			Prep. for Ed. Attain.			Stability of Exp.			Congr. for High Ed.		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Some High School	4	3.39	.33	4	2.68	.68	4	2.63	.60	3	2.89	.77
Diploma or GED	52	3.51	.48	51	3.04	.41	52	2.41	.73	50	2.82	.62
Some College	94	3.66	.40	95	3.17	.45	95	2.20	.75	92	2.81	.61
2-year Degree	142	3.66	.39	142	3.18	.44	141	2.26	.66	138	2.91	.62
4-year Degree	195	3.80	.33	195	3.63	.45	194	2.10	.76	187	2.95	.61
Graduate Degree	80	3.82	.28	80	3.42	.44	81	2.04	.74	79	3.18	.62

Table 8

SEAEA Factor Means by Student Academic Performance

	Exp. and Valuing			Prep. for Ed. Attain.			Stability of Exp.			Congr. for High Ed.		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Mostly A's	202	3.85	.28	201	3.42	.44	203	2.00	.75	199	3.26	..55
A's and B's	218	3.72	.36	219	3.26	.45	217	2.14	.65	213	2.89	.55
B's and C's	113	3.58	.45	113	3.11	.42	113	2.42	.75	105	2.63	.61
C's and D's	30	3.43	.45	30	2.98	.48	30	2.56	.69	28	2.40	.48
D's and F's	7	3.22	.22	6	2.62	.36	7	2.82	.73	7	2.24	.76

Research Question 2: Communication of Expectations

Quantitative responses. Parents were asked to report how they communicate their educational expectations to their child. They were provided with 12 strategies from which to choose and were instructed to select all that apply. No parents reported that they did not communicate their expectations to their child, and only five percent of parents indicated that they wait for the child to initiate conversations about their educational future. The most commonly selected strategy identified by over eighty percent of parents was encouraging the child to set high goals for his/herself. A strong majority of parents also indicated that they communicate their educational expectations to their child by talking about college using “when” statements, getting involved in their child’s school activities, and linking the child’s current education to their future. Less common strategies included college visits and encouraging the child to look at college websites. Complete results may be found in Table 9.

Parents were also asked to report the frequency with which they communicate their educational expectations to their child. All parents reported communicating their expectations to their child. Approximately 27% of parents reported communicating their expectations several times a year, 34% monthly, and 29% weekly. A small percent of parents reported communicating their expectations at the high and low extremes (four percent reported communication one to two times a year and seven percent reported communication daily).

Table 9

Percentage of Parents Engaging in Select Strategies of Communication

Strategy	N	% of Parents
Encourage child to set high goals for his/herself.	492	82.3
Talk about college using “when” statements (e.g., “When you go to college...”).	411	68.7
Get involved in child’s school activities.	406	67.9
Link child’s current education to their future.	397	66.4
Talk to child about taking college preparatory classes.	378	63.2
Connect their school grades to college admission.	362	60.5
Link child’s interest to college majors.	344	57.5
Talk to child about saving money for college.	263	44.0
Encourage child to look at college websites.	186	31.1
Take child on college visits.	152	25.4
Wait for the child to initiate conversations about their educational future.	30	5.0
Do not communicate.	0	0.0

Note: Parents were instructed to mark all that apply, therefore percentages will not add up to 100%.

Qualitative responses. In addition to the list of communication strategies provided to parents, they were also asked to list any additional methods that they use to communicate their educational expectations to their child. Fifty parents (8.4%) provided additional responses. The responses to these questions were coded using a framework from Creswell (2003). First, the responses were organized and read thoroughly in order to

obtain a general sense of the data. Next, the responses were coded by topic and similar topics were clustered together. The categories that resulted were given descriptive names and the responses were all recoded based on those categories that had emerged. This analysis resulted in the following categories:

1. Bringing up the college or job experience of self or other family members
2. Depicting college as part of life
3. Relating education to money or material items
4. Using technology to facilitate conversation
5. Promoting active exploration of educational and occupational options
6. Emphasizing the fun aspects of college
7. Relating school and grades to future opportunities
8. Talking about the options that college provides

Selected quotations from the aforementioned categories are included in Table 10.

Interrater agreement was conducted between the author and another graduate student.

Agreement after individually coding the responses into the eight categories was 96%.

Approximately a third of parents reported communicating their expectations to their child by *bringing up the college or job experience of themselves or other family members*. Within this category, parents mentioned simply bringing up the experience and also connecting family experiences to success. Some parents also highlighted the value of having the child be involved in a sibling's college experience.

Another strategy echoed by 12% of parents was that they indicate to their child that *college is just part of life*, and is just the next step. Twelve percent of parents also indicated that they try to *connect education to money or material things*, having conversations with their children about the role of college in a steady job and income. Several parents mentioned that they bring up material items that the child wants or will

want (car, clothes, etc.) and tell their child that these things will be difficult to afford without continuing on in school.

Using technology to facilitate communication was also mentioned by several parents in the sample (12%). This included looking at grades online, using the internet to search for colleges together, reviewing college application and financial aid materials together, and using text messaging or email to send information to the child. Parents also reported encouraging the *active exploration of educational and occupational options* (12%). Encouraging job shadowing and visits to the career center, as well as visiting college campuses were frequent activities listed.

One interesting strategy brought up by eight percent of parents was attempting to *depict college as not just about hard work and classes*, but also about fun. Parents mentioned bringing their child to university sporting events, talking about fun in the dorms, and the possibility of study abroad opportunities. Eight percent of parents also reported that they *relate school and grades to future opportunities*, as well as *talk about the options that a college education provides*.

Table 10

Selected Quotations from Open-Ended Question

Category	% of Parents	Representative Quotations
Bringing up the college or job experience of self or other family members	32%	<ul style="list-style-type: none"> • With my own experiences and college performance—I allow her to be involved with my current college experience. • Discuss my own experiences and sibling experiences in college and beyond. • I point out examples of family members and their jobs, thereby creating positive role models and tangible examples of the benefits of higher education. • Show the importance that our education degrees placed on our success. • We get her involved in her older sister’s experiences at the University of Minnesota, like moving into the dorm, family day, sporting events, etc.
Depicting college as part of life	12%	<ul style="list-style-type: none"> • It is an expectation that she will attend college—not an option. This has always been our focus as a family. • College is not an option in our household. It’s like eating, drinking, or working for a living. It just is and there is no exception. Work hard now to learn study skills for your future education. • Ongoing communication as a natural and expected part of life. • All of my child's relatives went to college and it has always been the expectation that all of my kids will attend college. There has never been a question, they have known since early childhood.
Relating education to money or material items	12%	<ul style="list-style-type: none"> • I SHOW HIM MY PAY CHECK. He won’t get that without a college degree. • Talk about how school is important to make the kind of money for the things he wants and needs. • Explain how jobs/careers and education go hand in hand and pay increase goes up.

Category	% of Parents	Representative Quotations
Using technology to facilitate conversation	12%	<ul style="list-style-type: none"> • Talk, research colleges online together. • Going to Fastweb with her to look at colleges and funding.
Promoting active exploration of educational and occupational options	12%	<ul style="list-style-type: none"> • He is interested in DNR and I offer to bring him to work to see how the field works. I offer to introduce him to DNR employees and speak to them about what he will need to do to get an education in that particular field. • We work in educational activities into vacations--museums, historical sites, famous colleges (for instance touring Harvard as part of a trip to Boston). • Encourage visits to career center.
Emphasizing the fun things about going to college	8%	<ul style="list-style-type: none"> • She likes visiting foreign countries (3 times in her life so far), so I talk about the possibility of studying abroad in college. • We are active in our own college alumni associations, follow football and basketball seasons, and talk about our own positive college experiences.
Relating school and grades to future opportunities	8%	<ul style="list-style-type: none"> • Good grades help qualify you for college entrance and tuition • Let him know how important it is for his grades to be up for college acceptance. • I only express the importance to keep her mind set on a realistic future based on her academic achievements
Talking about the options that college provides	8%	<ul style="list-style-type: none"> • I communicate my expectations by drawing attention to the job market and the variety of options there are, especially when in the community...we discuss what it takes to get these positions. • I tell him daily I want him to do his best so he has all the options he needs to go to the college he wants for the type of job he wants to get.

Note: Some parent responses fit into more than one theme.

Research Question 3: General Parent Knowledge and Understanding of the College Preparation and Application Process

Parents were asked to respond to five questions regarding their college knowledge (See Appendix C). While the majority of parents agreed or strongly agreed that they knew what tests and courses their child would need to take to be eligible for college, a notable minority disagreed. Approximately 27% of parents reported not knowing what tests their child needs to take, and roughly 26% of parents reported not knowing what courses their child needs to take to be eligible for college. Additionally, while 76% of parents indicated that they have a plan to help their child finance college, only 57% reported knowing the different options available for financing a college education. Lastly, almost a third of parents expressed that they do not understand what it will take for their child to fill out a college application. Complete descriptive statistics for these items may be found in Table 11.

Table 11

Descriptive Data for College Knowledge Items

	Strongly Disagree	Disagree	Agree	Strongly Agree	M	SD
I have a plan to help my child get the financial aid he/she needs to get into college.	2.2%	21.9%	52.2%	23.6%	2.97	.74
I know what tests my child needs to take to be eligible for college.	1.8%	25.4%	49.6%	23.3%	2.94	.75
I know what courses my child needs to take to be eligible for college.	1.4%	24.3%	51.1%	23.2%	2.96	.73

	Strongly Disagree	Disagree	Agree	Strongly Agree	<i>M</i>	<i>SD</i>
I understand what it will take for my child to complete a college application.	1.8%	27.5%	48.6%	22.1%	2.91	.75
I know the different options available for financing college education.	4.0%	39.2%	40.8%	15.9%	2.69	.78

This knowledge did not vary as a function of age, as may be expected. Parents of 8th graders reported similar levels of college knowledge as parents of 9th and 10th graders. Parents who already have a child in college (n= 200) reported significantly higher amounts of knowledge regarding college preparation (represented by significantly higher means on all five questions) than parents who did not have children in college (n= 368) (see Table 12). When that variable was controlled for, 35% of parents reported not knowing what tests and 31% reported not knowing what courses their child needs; 71% had a financial plan but 66% did not know the different financing options.

Four of the five college knowledge questions significantly varied by parent education level; generally the more education they had, the more knowledge they reported regarding college preparation and admission information (see Table 13). In addition, parents whose children had higher grades had significantly higher knowledge of what tests and courses their children needed to take. Also, parents of high achieving students were significantly more likely to report that they had a financial aid plan (see Table 14).

Table 12

Parental College Knowledge and College-Enrolled Children

	None in College (N= 368)		Children in College (N= 200)		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I have a plan to help my child get the financial aid he/she needs.	2.88	.73	3.15	.71	17.35**	.00
I know what tests my child needs to take to be eligible for college.	2.82	.77	3.18	.65	31.42**	.00
I know what courses my child needs to take to be eligible for college.	2.88	.75	3.13	.66	15.00**	.00
I understand what it will take for my child to complete a college application.	2.77	.77	3.18	.64	39.90**	.00
I know the different options available for financing college.	2.48	.76	3.06	.70	78.35**	.00

* $p < .01$, ** $p < .001$

Note: Due to the number of tests being conducted, a Bonferonni adjustment was made to set the alpha at .01

Table 13

Parental College Knowledge and Parental Education Level

	Mean (SD)						<i>F</i>	<i>P</i>
	Some HS (N= 4)	Diploma/ GED (N= 52)	Some College (N= 95)	2-year (N= 142)	4-year (N= 196)	Graduate School (N= 81)		
I have a plan to help my child get the financial aid he/she needs to get into college.	3.00 (.82)	2.81 (.72)	2.95 (.79)	2.86 (.69)	3.04 (.75)	3.15 (.66)	2.41	.03
I know what tests my child needs to take to be eligible for college.	2.50 (.58)	2.46 (.83)	2.76 (.74)	2.73 (.70)	3.14 (.68)	3.42 (.55)	16.79**	.00
I know what courses my child needs to take to be eligible for college.	2.50 (.58)	2.50 (.80)	2.78 (.70)	2.79 (.69)	3.15 (.68)	3.35 (.58)	13.22**	.00
I understand what it will take for my child to complete a college application.	2.50 (.58)	2.48 (.75)	2.78 (.74)	2.76 (.71)	3.08 (.73)	3.23 (.67)	9.25**	.00
I know the different options available for financing college education.	2.50 (.58)	2.35 (.76)	2.61 (.74)	2.48 (.74)	2.86 (.81)	2.91 (.71)	6.85**	.00

* $p < .01$, ** $p < .001$

Note: Due to the number of tests being conducted, a Bonferonni adjustment was made to set the alpha at .01

Table 14

Parental College Knowledge and Child Academic Achievement

	Mean (SD)					F	P
	Mostly A's (N= 203)	A's & B's (N= 220)	B's & C's (N= 113)	C's & D's (N= 30)	D's & F's (N= 7)		
I have a plan to help my child get the financial aid he/she needs to get into college.	3.12 (.70)	2.93 (.72)	2.91 (.78)	2.63 (.77)	2.83 (.41)	4.16**	.00
I know what tests my child needs to take to be eligible for college.	3.11 (.71)	2.97 (.73)	2.78 (.69)	2.40 (.72)	2.17 (1.2)	10.35**	.00
I know what courses my child needs to take to be eligible for college.	3.16 (.70)	2.96 (.68)	2.78 (.73)	2.43 (.73)	2.33 (1.2)	11.30**	.00
I understand what it will take for my child to complete a college application.	3.01 (.76)	2.91 (.74)	2.86 (.70)	2.60 (.72)	2.33 (1.2)	3.24	.02
I know the different options available for financing college education.	2.76 (.81)	2.66 (.77)	2.71 (.77)	2.37 (.81)	2.33 (.52)	2.01	.09

* $p < .01$, ** $p < .001$

Note: Due to the number of tests being conducted, a Bonferonni adjustment was made to set the alpha at .01

Research Question 4: Differences in College Knowledge by Level of Expectations

Parents were divided into a “high expectations” and “low expectations” group based on their overall factor mean for the Expectations and Valuing of Education factor of the *SEAEA*. Parents with a mean score of less than three (meaning that they tended to disagree with the items that loaded on the Expectations and Valuing of Education factor, such as “I hope my child will continue his/her education after high school.”) were placed into the low expectation group. Parents with means above three were placed into the high expectation group. A MANCOVA was employed in order to determine if parent responses to each of the five college knowledge questions were different for parents with low versus high expectations. Because parent education and student academic achievement were related to Expectations and Valuing of Education, they were entered as covariates in the model. Despite the unequal sample sizes, tests for homogeneity of variance indicated that this assumption was not violated.

Results indicated that differences between the high and low expectation groups were not significant for any of the five college knowledge questions. After controlling for education and student achievement, parents with high expectations and parents with low expectations did not differ on their knowledge of college preparatory tests and coursework, financial aid options, financial planning, or college applications (see Table 15).

Table 15

Differences in College Knowledge between Parents with Low and High Expectations

	Low Expectations		High Expectations		<i>F</i>	<i>p</i>
	<i>N</i>	<i>M</i>	<i>N</i>	<i>M</i>		
I have a plan to help my child get the financial aid he/she needs to get into college.	23	2.73	555	2.98	2.43	.12
I know what tests my child needs to take to be eligible for college.	23	2.72	545	2.94	2.21	.14
I know what courses my child needs to take to be eligible for college.	23	2.76	547	2.96	1.92	.17
I understand what it will take for my child to complete a college application.	23	2.63	545	2.92	3.32	.07
I know the different options available for financing college education.	23	2.55	545	2.68	0.65	.42

p* < .05, *p* < .01

Research Question 5: Examination of College Knowledge as a Predictor of Expectations

In order to determine the power of college knowledge in predicting Expectations and Valuing of Education, a multiple regression was performed. Due to the interaction between college knowledge and three demographic variables, the variables of parent education level, child's academic achievement, and whether or not the parent had other college-enrolled children were entered into the first model. In the second model, the five college knowledge questions were entered in order to determine if parent college knowledge explained any additional variation in Expectations and Valuing of Education after controlling for demographic variables.

Model 1, which contained the three demographic variables as predictors, explained 13.4% of the variance in Expectations and Valuing of Education ($F(3, 543) = 29.09, p < .001$) (see Table 16). The addition of the college knowledge variables in Model 2 accounted for an additional 4.3% of variance ($F(5, 538) = 6.66, p < .001$) (see Table 17). Model 2, which included the demographic variables and the college knowledge variables, accounted for 17.7% of the variance in Expectations and Valuing of Education (adjusted $R^2 = 17.7$). In this model, parent education level ($\beta = .103$) and having a financial aid plan ($\beta = .115$) were significant, positive predictors of Expectations and Valuing of Education, while the child's academic achievement ($\beta = -.244$) and having children in college ($\beta = -.087$) were significant, negative predictors.

Table 16

Summary of Regression Analysis for Demographic Variables Predicting Expectations (Model 1)

	β	t	p
Parent Education Level	.170**	4.12	.00
Academic Achievement of Child	-.288**	-6.98	.00
Children in College	-.030	-0.75	.45
* $p < .05$, ** $p < .01$ (adj. $R^2 = .134$)			

Table 17

Summary of Regression Analysis for College Knowledge Variables Predicting Expectations (Model 2)

	β	t	p
Parent Education Level	.103*	2.39	.02
Academic Achievement of Child	-.244**	-5.86	.00
Children in College	-.087*	-2.08	.04
I have a plan to help my child get the financial aid he/she needs to get into college.	.115*	2.48	.01
I know what tests my child needs to take to be eligible for college.	.092	1.34	.18
I know what courses my child needs to take to be eligible for college.	.056	0.84	.40
I understand what it will take for my child to complete a college application.	.054	0.83	.41
I know the different options available for financing a college education.	-.014	-0.24	.81
* $p < .05$, ** $p < .01$ (adj. $R^2 = .177$)			

Chapter 5

Discussion

Although research has demonstrated the important role of parental expectations and aspirations on a number of student outcome variables including academic achievement and children's own expectations, the findings have been clouded by measurement issues (e.g., lack of operational definitions, single-item measures, etc.). In addition, the majority of research regarding the prediction of expectations and aspirations has focused solely on demographic variables. The purpose of this study was to determine if there is a measurable distinction between parental expectations and parental aspirations, to gain an understanding of the ways in which parents communicate their educational beliefs to their children, to examine parental knowledge and understanding of the college preparation and application process, and lastly to explore the relationship between parental college knowledge and parental expectations and aspirations.

Summary of Findings

The factor analysis of the *SEAEA* resulted in four factors: Expectations and Valuing of Education, Preparation for Educational Attainment, Stability of Expectations and Aspirations, and Congruency for High Educational Attainment. Overall means for all of the four factors of the *SEAEA* were relatively high. Expectations and Valuing of Education had the highest mean of the four factors indicating that the vast majority of parents in the sample held high expectations for their child's educational attainment, wanted their child to graduate from college, and believed that college was important to their child's future. The highest correlation between the factors was between

Expectations and Valuing of Education and Preparation for Educational attainment ($r=.60$), highlighting the moderately strong relationship between parents' beliefs and their actions. Parents with higher expectations and aspirations were also doing more to help their child prepare for college.

Of the demographic variables included in this study, student academic performance and parent education level were both related to factors of the *SEAEA*. Similar to past research which has suggested that parents hold higher expectations and aspirations for children who are academically successful (Englund et al., 2004; Goldenberg et al., 2001; Singh et al., 1995), parents in this sample who had children who were academically successful in school held higher expectations and aspirations for them and were involved in more activities to prepare their child for higher education (e.g., encouraging the child to research colleges, helping the child choose courses that will prepare them for college, etc.) than parents who had children with lower academic achievement. Additionally, parents with higher education held higher expectations for their children and reported engaging in more college preparatory activities than parents with lower levels of education; this is in accordance with previous research (De Civita et al., 2004; Gill & Reynolds, 1999; Hossler & Stage, 1992).

Items reflecting expectations (realistic goals) and those reflecting aspirations (ideal goals) were highly correlated and thus loaded onto the same factor (Expectations and Valuing of Education). However, further analyses revealed that although both expectations and aspirations were high, parental aspirations for their children's educational attainment were higher than their expectations, confirming a subtle, yet

significant difference between the two. This lends support to previous research which has defined aspirations as ideal, best-case scenario goals and expectations as goals more based on reality (Glick & White, 2004; Goldenberg et al., 2001; Trusty, 2002). In this sample, the aspirations were higher than expectations but both were high; thus the difference between the two was small. It is possible that in a larger, more diverse sample (in regards to parent education and student achievement), aspirations could be quite a bit higher than expectations, causing the difference to be more notable and the items to load separately.

Between the qualitative and quantitative responses, a total of 19 methods that parents use to communicate their educational expectations to their children were identified. All parents who participated in the survey reported that they communicate their expectations in some way to their child. The most frequently reported method of communication was encouraging the child to set high goals for his/herself, followed by talking about college using “when” statements and getting involved in school activities. Qualitative responses provided additional methods of communication, including bringing up the college or job experience of self, depicting college as a part of life, and relating education to money, among other methods. These data help to fill a gap in research, which has not commonly focused on the way parents attempt to share their own expectations for the educational attainment of their child with that child.

A notable percentage of parents reported that they lacked information and knowledge regarding necessary coursework and tests for college eligibility, financial aid options, and how to fill out a college application. Interestingly, parents of older students

did not report any more knowledge than parents of younger students. This is surprising, as one might expect that parents would receive more information on college readiness and preparation (and thus have greater knowledge) as the college application period draws closer.

Additionally, parents with less education reported less knowledge than parents who had higher amounts of education, likely because they were not able to fall back on their own personal experiences with college applications and attendance. Lastly, parents who had low-achieving children reported less knowledge regarding tests and courses necessary for college eligibility compared to parents of high-achievers; these parents were also less likely to have a plan to help their child get the financial aid he/she needs. It is possible that the parents of low-achieving students do not feel college is a likely option, and thus feel the need to do less to prepare for that possibility.

It was hypothesized that perhaps parents with low expectations would seek out less college information and have less college knowledge, while parents with high expectations would have greater college knowledge, but this did not appear to be the case. After controlling for parent education and student achievement (both of which were connected to the factor of Expectations and Valuing of Education), there were no significant differences between parents with high expectations and parents with low expectations regarding college knowledge. The role of parent's own education level and their child's academic achievement appear to be critical in the amount of information parents have about college preparation.

In accordance with previous research findings that have demonstrated the relationship between parent education, student achievement, and parent expectations (e.g., De Civita et al., 2004; Englund et al., 2004; Gill & Reynolds, 1999; Hossler & Stage, 1992; Singh et al., 1995), both parent education level and child's academic achievement were found to significantly predict parental expectations. The addition of the five college knowledge questions to the regression resulted in an additional 4% of variance explained. However, only one college knowledge question—having a financial aid plan—was a predictor of Expectations and Valuing of Education. This indicates that in general, knowledge of what courses and tests it takes to be eligible for college, knowledge of financial aid options, and an understanding of what it takes to fill out a college application does not impact whether or not a parent expects their child to continue his/her education after high school. This is somewhat surprising, as it seems that a better understanding of realistic college preparation and finances would impact a parent's perception of college as a realistic goal for his/her child. However, as there does not appear to be any previous research regarding the connection of college knowledge to expectations, this analysis was purely exploratory in nature and thus the hypothesis was not based on previous empirical findings.

Limitations and Merits

There were several limitations to this study which should be noted. First, although numerous methods were employed to make the survey accessible to as many parents as possible (utilizing voice messages, emails, and in person contact at conferences), there were parents who did not have the opportunity to participate. Not all parents in the school

were included on school-wide email listserves and phone messaging systems.

Additionally, parents could decide whether or not they would like to participate in this survey, thus resulting in a self-selected sample. As with any self-report survey, it is possible that parents who did participate did not answer truthfully. Parents were made aware that the surveys were completely anonymous and would not be connected to their name or child in any way. However, it is possible that due to the nature of the questions, parents answered in a way that would make them look positive or in the way they thought they “should” answer.

Although there was a range in demographics of the participating parents, this study may have benefited from the inclusion of more parents with low-achieving children and more parents with lower education levels. Parents who participated in this survey had students in five different schools, the majority of which consisted of predominantly Caucasian families. One of the participating schools had very little participation; this school unfortunately consisted of the most diverse student population. Because parents were not asked to disclose their ethnicity, the survey could not be analyzed on the basis of ethnic background. It is possible that the participating parents are homogenous in regards to ethnic/racial composition and thus the generalizability would be limited. In addition, this survey was only administered to parents with students in 8th, 9th, or 10th grade. It is quite possible that parents with much older or much younger students may have answered the questions in a different manner.

Last, the five questions regarding college knowledge actually measured parental perceptions of college knowledge. Parents may have agreed with statements such as “I

know what courses my child needs to take to be eligible for college” and thought that they had the correct information, but actually were incorrect in that knowledge. This could have been controlled for by asking parents specific, information-based questions regarding coursework, tests, etc.

Despite these limitations, this study has contributed to the field by utilizing a multi-item instrument developed through an extensive review and critique of the literature to examine expectations and aspirations, as well as analyzing the data in an attempt to understand the differences between the two types of educational beliefs. In addition, this study provided information regarding the methods through which parents communicate their expectations to their children, which has been the focus of little research. This study also highlighted the discrepancy between what parents want for their children’s education and their knowledge of what it will take to help their child achieve a higher degree. Lastly, this research has attempted to broaden the understanding of what predicts parental expectations and aspirations by examining how these beliefs relate to college knowledge.

Implications for Research and Practice

Future research should operationally define expectations and aspirations, and should make a point to distinguish the two when writing items and/or interview questions. The *SEAEA* should likely be administered to a focus group of parents in order to further refine it. A larger and more diverse sample could be useful in the future exploration of aspirations and expectations. Because parent education and academic achievement were predictive of expectations and aspirations, a sample consisting of a

much larger percentage of parents with low education and/or low-achieving students would perhaps produce more variability and thus help to differentiate the two parental beliefs. In addition, the validity of the *SEAEA* could be strengthened through the administration of the scale to a larger and more diverse sample and subsequent analysis utilizing confirmatory factor analysis.

In this sample, only 17.7% of the variance in parental expectations and aspirations was explained, leaving room for the discovery of more influential predictors. It is important for future research to branch out from the sole examination of demographic variables in conjunction with expectations and aspirations, and toward the examination of other variables that may help deepen the understanding of how parents develop expectations and aspirations. Such variables may include parental self-efficacy, student interest in school, perceptions of intelligence, trust in the school system, etc. The development of expectations and aspirations is no doubt complex and influenced by a number of factors; data collected through focus groups or interviews could potentially strengthen research in this area by providing a more holistic view of this process and the variables associated with it.

Research could also examine the effectiveness of various communication strategies in helping children to understand their parent's expectations and develop high personal educational expectations. Qualitative data gathered from focus groups or interviews also would be useful in helping to understand the process of transmitting expectations from parent to child. Last, longitudinal data collection would also provide a

better understanding of expectations, aspirations, and college knowledge throughout the lifespan.

This study provides several implications for practice. In this sample, parents almost universally expressed a desire for their child to continue his/her education after high school (regardless of whether or not the parent attended college or how successful the child was in school). Despite these desires, there is a gap in the knowledge of what needs to be done to help students be eligible for college. Over a quarter of parents indicated that they did not know what tests and courses their child needed to take in order to be eligible for college, and 40% of parents indicated that they did not know the different financial aid options. Additionally, the less education a parent had, the less knowledge he/she had regarding college preparation.

A parent's desire to have their child attend college can only do so much; the practical knowledge of what needs to be done to make that goal a reality can be provided to parents by school personnel. School personnel should recognize that as more parents and students expect to continue on to college, a larger (and perhaps more diverse) audience for college readiness and preparation information develops. Schools need to take the lead in providing information regarding college preparatory coursework and entrance requirements to all parents and students early in high school, if not in middle school.

Additionally, research has demonstrated the significant impact of filling out a FAFSA on college attendance (Roderick et al., 2008), as well as the misunderstanding among students and parents regarding the actual costs of college tuition (Kirst & Venezia,

2004). Knowledge is power; by educating parents and students about the actual cost of attendance and financial aid options for higher education, as well as what needs to be done in order to apply for financial aid, school personnel will be able to help make college realistically possible.

Conclusion

Previous research has demonstrated that parental aspirations and expectations for their children's educational attainment are critical factors in the student's academic achievement, his/her own expectations for educational attainment, and in the actual educational attainment of the student. Despite these important outcomes, research findings have been limited by the lack of operational definitions and inconsistency of the use of the terms "aspiration" and "expectation," as well as the use of single item measures. This study included the development of a scale designed with the intent of determining if expectations and aspirations could be distinguished. Although the items loaded together on the same factor, further analyses suggested a significant difference between the two; aspirations (ideal goals) were higher than expectations (realistic goals). The relationship between aspirations and expectations should be explored in the future with a more diverse sample. In the meantime, continued attention should be paid to the wording and construction of items.

The results of this study indicated that the vast majority of parents in this sample not only aspire for their children to attend college after high school, but see college as a realistic goal for their children as well. Parents indicated that they are all communicating their educational expectations in some way to their child. However, far too many parents,

in particular those with less education and low-achieving students, indicated that they do not have the knowledge regarding what it will take for their child to be eligible for college, as well as the options available to finance a college education. As researchers, practitioners, and policymakers continue to push for high school graduates who are prepared for college-level work, the reality remains that of the 70% of high school seniors who continue on to college after high school, 30% drop out after their first year. More needs to be done in order to help students and their parents make this clear dream a reality.

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Appendix A

Parental Expectations and Aspirations

Reference	Term Utilized	Respondent	Item
Benner & Mistry (2007)	Expectations	Mothers	No item provided. Mothers rated expectations, choosing from a 6-point scale ranging from some high school to graduate or professional school.
Cheng & Starks (2002)	Variable called aspirations, but use aspirations and expectations interchangeably.	Children	“How far in school do you think your father and mother want you to go?” 5-item response set ranged from high school or less to graduate degree.
Dandy & Nettelbeck (2002)	Use expectations and “preferred” or “like.”	Parents	<i>Expectations:</i> Amount of education parents thought their child was likely to attain. <i>Preferred attainment:</i> Amount of formal education parents would like child to complete. No response set provided.
Davis-Kean (2005)	Expectations	Parents	“How much schooling do you expect that your child will complete?” 8-point scale ranging from 11 th grade or less to MD, JD, or PhD.
De Civita, Pagani, Vitaro, & Tremblay (2004)	Aspirations	Mothers	“What level of education do you want your child to complete?” 5-item response set ranged from 9 th grade to university.
Englund, Luckner, Whaley, & Egeland (2004)	Expectations	Parents	“How far do you think your child will go in school?” 5-item response set ranged from will not complete high school to will go to graduate or professional school.

Reference	Term Utilized	Respondent	Item
Fan (2001)	Aspirations	Parents and children	<i>Parents:</i> “How far do you expect your child to go in education?” No response set provided. No item provided for children.
Fan & Chen (2001)	Aspirations/expectations	Not clear.	For the meta-analysis, educational expectations, aspirations, and values school achievement were included in one dimension entitled expectations/aspirations.
Flowers & Flowers (2008)	Expectations	Parents	Parents rated their expectation of the child’s educational attainment based on a 7-item response set, ranging from less than high school graduation to PhD, MD, or other advanced degree.
Gill & Reynolds (1999)	Expectations	Parents and children	<i>Parents:</i> No item provided. Parents rated expectations, choosing from four categories, ranging from graduate high school to go to graduate school/complete graduate degree) <i>Children:</i> “My parents expect me to do well in school.” Rated on a 4-point scale.
Glick & White (2004)	Expectations	Parents and children	<i>Parents:</i> No item provided. Responses could range from less than high school to post-graduate education. <i>Children:</i> “As things stand now, how far in school do you think you will get?” Item response set not provided.
Goldenberg, Gallimore, Reese, & Garnier (2001)	Aspirations and expectations (measured separately)	Parents	<i>Aspirations:</i> “How far do you want your child to go in formal schooling?” <i>Expectations:</i> “How far do you think your child will go in formal schooling?” 6-item response sets for both questions ranged from finish elementary to finish university.
Goyett & Xie (1999)	Expectations	Parents and children	<i>Parent:</i> No item given. 6-item response set ranged from less than high school to doctorate. <i>Child:</i> “As things stand now, how far in school do you think you will get?” Response set the same as parent question.

Reference	Term Utilized	Respondent	Item
Halle, Kurtz-Costes, & Mahoney (1997)	Expectations	Parents	Parents rated likelihood that target child would complete various levels of school (ranging from 6 th grade to college) on a 5-point scale.
Hong & Ho (2005)	Aspirations	Parents	“How far in school do you want your child to go?” No response-set provided.
Hossler & Stage (1992)	Use aspirations and expectations interchangeably.	Parents and children	No clear definition or items provided. Aspirations/expectations reference educational attainment. No response set provided.
Jacobs & Harvey (2005)	Use expectations and “desired education.”	Parents	<i>Aspirations:</i> “How much education do you really desire for your child to have?” <i>Expectations:</i> “How much education do you really expect your child to have?” 7-item response set ranged from leave school as soon as possible to graduate from university.
Jeynes (2003)	Expectations	Parents	Meta-analysis included expectations that parents had for the academic success of their children. No items or response set provided.
Jodl, Michael, Malanchuk, Eccles, & Sameroff (2001)	Use “expectations/aspirations”	Parents and children	<i>Parents:</i> 1. “How far would you like your child to go in school?” 2. “How far will your child actually go in school?” <i>Children:</i> items were the same, only rephrased . No response set provided for parents or children.
Juang & Silbereisen (2002)	Expectations	Parents	“What school degree do you want your child to complete?” Parents could choose from two options: up to 8 th /10 th grade or the German equivalent high school diploma.

Reference	Term Utilized	Respondent	Item
Kaplan, Liu, & Kaplan (2001)	Expectations	Children	“How far do your parents expect you to go in school?” 7-item response set ranged from some high school to professional degree.
Marjoribanks (1995)	Aspirations	Parents and children	Interviewed parents and children. <i>Parents:</i> “How much education would you like your child to receive, if at all possible?” <i>Children:</i> Asked students what educational level “they really expected to attain” and what educational level “they would really like to achieve.”
Mau (1995)	Use aspirations and expectations interchangeably.	Children	<i>Perceived parent expectations:</i> “How far in school do you think your father and mother want you to get?” <i>Children’s aspirations:</i> “As things stand now, how far in school do you think you will go?” 6-item-response set for both questions ranged from less than high school diploma to higher level of school after graduating college.
Mau (1997)	Expectations	Children	“How far in school do you think your father and your mother want you to get?” 6-item-response set ranged from less than high school diploma to higher level of school after graduating college.
Okagaki & Frensch (1998)	Expectations	Parents	<ol style="list-style-type: none"> 1. “What is the ideal amount of education you would like your child to attain?” 2. “How much education do you expect your child to attain?” 3. What is the very least amount of schooling you would allow your child to attain?” <p>All items had a 6-point response set ranging from complete high school education to get a graduate or professional degree.</p>

Reference	Term Utilized	Respondent	Item
Neuenschwander, Vida, Garret, & Eccles (2007)	Expectations	Parents	<p>Parent expectations were taken from three different separate studies.</p> <p><i>Study One:</i> “Right after school, do you expect your child to...” Parents responded to the following: vocational/2-year education, full-time job, military, 4-year college, get married.</p> <p><i>Study Two:</i> “How much education do you expect your child to receive?” 9-item response set ranged from some high school to advanced degree.</p> <p><i>Study Three:</i> “How much education do you expect your child to complete?” 9-item response set ranged from middle-school with low demands to university.</p>
Patrikakou 1996	Expectations	Parents and children	<p><i>Parents:</i> “How far do you expect your 8th grader to go?” 12-item response set ranged from less than high school diploma to PhD, MD, or other advanced degree.</p> <p><i>Children:</i> “How far in school do you think your mother wants you to go?” 4-item response set ranged from less than high school diploma to attend a 4-year college.</p>
Raty (2006)	Expectations	Parents	<p>Parents were asked to rate the likelihood of their child continuing his/her education in gymnasium (high school) or vocational education. Item responses based on a 6-point probability scale.</p>
Seyfriend & Chung (2002)	Expectations	Parents	<ol style="list-style-type: none"> 1. “How much schooling would you like your child to get eventually?” 2. “How much schooling do you actually expect your child will complete?” <p>7-point response set for both questions ranged from some high school to graduate or professional school.</p>

Reference	Term Utilized	Respondent	Item
Singh, et al., (1995)	Aspirations	Parents	<ol style="list-style-type: none"> 1. “How far in school do you expect your child to go?” 10-item response set ranged from less than high school to PhD or MD. 2. “How far in school do you want your child to go? 6-item response set ranged from less than high school to higher school after college.
Spera (2006)	Aspirations	Children	“How far in school would your parents like you to go?” 8-item response set ranged from some high school to PhD, JD, MD.
Trusty (2002)	Expectations	Parents and children	<p><i>Parents:</i> No item provided. Parents rated expectations on a scale “similar to that of their children.”</p> <p><i>Children:</i> “What is the highest level of education you ever expect to complete?” 10-item response set ranged from less than high school to professional degree such as JD or MD.</p>
Wentzel (1998)	Aspirations and expectations (measured separately)	Parents	<p><i>Aspirations:</i> “How much schooling WOULD YOU LIKE your youngest child in the school to receive?” 8-item response set ranged from some high school to PhD.</p> <p><i>Expectations:</i> Parents were asked what grade they believed their children would get in each of the following subjects: reading, language, spelling, social studies, science, and mathematics.</p>
Wood, Kaplan, & McLoyd (2007)	Expectations	Parents	“How far do you think your child will <i>actually</i> go in school?” 5-item response set ranged from some high school to graduate or professional school.
Zhan 2006	Expectations	Mothers	“Looking ahead, how far do you think your child will go in school?” 5-item response set ranged from leave high school before graduation to take further training after college.

Appendix B

Scale of Educational Aspirations and Expectations for Adolescents (SEAEA)

Please respond to the following questions regarding your 8th, 9th, or 10th grade student. If you have more than one child in 8th, 9th, or 10th grade, please base your responses on the *older* child. The term *college* in these questions refers to Community and Technical Colleges, as well as Public and Private Universities.

To what extent do you agree or disagree with the following statements?				
	SD	Disagree	Agree	SA
1. I hope my child will continue his/her education after high school.				
2. My child is aware of my ideal educational dreams for him/her.				
3. In a perfect world, my child would graduate from college.				
4. I have great ambitions for my child's education.				
5. I have a goal in mind for how much education I would like my child to achieve.				
6. My hopes and dreams for my child's education have changed as he/she got older.				
7. Over the years, my ideal hopes and dreams for my child's education have changed due to his/her academic performance school.				
8. I would love for my child to graduate from college.				
9. I dream of my child obtaining an advanced degree (MA, JD, MD, PhD).				
10. As things stand now, I realistically expect my child to continue his/her education after high school.				
11. My child is aware of my educational expectations for him/her.				
12. It is a realistic goal for my child to graduate from college.				
13. My expectations for my child's education have changed as he/she got older.				
14. I know my child will do well on college entrance exams (ACT, SAT).				
15. I think it is likely that my child will obtain an advanced degree (MA, JD, MD, PhD).				
16. I believe that a college education is important for my child's future.				
17. I believe my child should go to college only if he/she wants to.				
18. It is most important that my child is learning, regardless of the grades he/she gets.				

To what extent do you agree or disagree with the following statements?				
	SD	Disagree	Agree	SA
19. My child holds the same educational goals for his/herself as I hold for him/her.				
20. It is not likely that my child will continue his/her education after high school.				
21. I believe that the educational goals I hold for my child will influence his/her own educational goals.				
22. I help my child choose courses that will prepare him/her for college.				
23. I encourage my child to research various colleges and universities.				
24. I have told my child that I expect him/her to go to college after high school.				
25. Over the years, my realistic expectations for my child's education have changed due to his/her academic success in school.				
26. I regularly talk to my child about his/her educational plans for after high school.				
27. I encourage my child to take classes that will challenge him/her.				
28. I have helped my child plan how he/she will get into college.				
29. I do not play a role in my child's selection of coursework.				

Qualifier: It would be important for any party wishing to use the *SEAEA* to read the entire dissertation in order to attain a theoretical foundation and understanding of the scale.

Appendix C

Additional Questions and Demographics

To what extent do you agree or disagree with the following statements?	SD	Disagree	Agree	SA
30. I have a plan to help my child get the financial aid he/she needs to get into college.				
31. I know what tests my child needs to take to be eligible for college.				
32. I know what courses my child needs to take to be eligible for college.				
33. I understand what it will take for my child to complete a college application.				
34. I know the different options available for financing college education.				

35. What grade is your child in?

- 8
- 9
- 10

36. Do you have any other children who have enrolled in some type of postsecondary education?

- No
- Yes

37. What grades does your child get? (Mark one.)

- Mostly A's
- A's & B's
- B's & C's
- C's & D's
- D's & F's

38. What is the highest level of education you *realistically* expect your child to achieve? (Mark one.)

- High School Graduate
- Some College
- 2-year Community College or Technical School
- 4-year College or University
- Graduate/Professional School
- I don't know
- Other _____

39. What is the highest level of education you would *ideally* like your child to achieve? (Mark one.)

- High School Graduate
- Some College
- 2-year Community College or Technical School
- 4-year College or University
- Graduate/Professional School
- I don't know
- Other _____

40. What is the highest level of education you completed? (Mark one.)

- Some High School
- High School Graduate/GED
- Some College
- 2-year Community College or Technical School
- 4-year College or University
- Graduate/Professional School
- Other _____

41. How do you communicate your educational expectations to your child? (Mark all that apply.)

- Talk to child about taking college preparatory classes
- Encourage child to set high goals for his/herself
- Encourage child to look at college websites
- Talk to child about saving money for college
- Take child on college visits
- Talk about college using "when" statements (e.g., "When you go to college...")
- Get involved in child's school activities
- Link child's current education to their future
- Link child's interest to college majors
- Connect their school grades to college admission
- Wait for the child to initiate conversations about their educational future
- Do not communicate

42. How often do you communicate your educational expectations to your child? (Mark one.)

- One to two times a year
- Several times a year
- Monthly
- Weekly
- Daily
- Do not communicate

43. Please list any additional ways you communicate your educational expectations to your child.