PATHWAYS TO HIGHER EDUCATION: PERCEPTIONS FROM COLLEGE-ENROLLED FORMER FOSTER YOUTH

A Thesis

Presented to the faculty of the Department of Public Policy and Administration

California State University, Sacramento

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF PUBLIC POLICY AND ADMINISTRATION

by

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SPRING 2015

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PATHWAYS TO HIGHER EDUCATION: PERCEPTIONS FROM COLLEGE-ENROLLED FORMER FOSTER YOUTH

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Abstract

of

PATHWAYS TO HIGHER EDUCATION: PERCEPTIONS FROM COLLEGE-ENROLLED FORMER FOSTER YOUTH

by

Terra Thorne

There are multiple challenges associated with being in the foster care system that inhibit academic success among this student population. As a result, an achievement gap has developed between foster youth and their peers in California's K-12 system, placing foster youth among the lowest performing students in the state (Barrat & Berliner, 2013). In recognition of the distinct challenges foster students face, California recently became the first state in the nation to identify them as a distinct student group for the purposes of K-12 funding and accountability. Under the Local Control Funding Formula, implemented in 2013, the state provides school districts supplemental funds for students with greater educational needs, including foster youth (EdSource, n.d.). However, the educational supports that foster youth need are not yet well known, and many districts are struggling to create appropriate services, teaching strategies or interventions that will help improve the academic performance of this particularly vulnerable student group.

This exploratory research was developed to help inform the conversation about foster youth success, by assessing possible factors that helped former foster youth achieve an important benchmark: enrolling in college. In this study, 33 former foster youth at two Northern California State University (CSU) institutions were surveyed about the factors they believe helped them beat the odds and successfully matriculate into higher education. These factors include social support, participation in the community and noncognitive strengths, such as perseverance.

The results of the survey indicate that these youth rely on a number of supports to help them matriculate into higher education. Of the assessed factors, respondents identified their "personal strength" as the most important in helping them succeed at enrolling in college, indicating the key role that noncognitive factors may have for this population. Social support was also identified as important. In particular, students perceived social support as creating a "collegegoing" culture where students saw higher education as a possibility and were provided the emotional social support that helped them enroll. These findings could help provide a foundation for further research among the academic and educational communities about which factors will best support the academic needs and noncognitive growth of foster youth in California.

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ACKNOWLEDGEMENTS

To Miles, my husband, my rock, and my love: this thesis would not have happened without your unwavering belief and unending support.

To my mom: you instilled within me self-determination, and it has allowed me to see this endeavor through to the end. I hope to be as important to my children as you are to me.

To my readers, Andrea and Steve: your patience, guidance, wisdom and willingness to read drafts at all hours of the evening helped me achieve my very best. I am forever grateful.

To the PPA faculty: you push students to excel, and in the process, you open our eyes to possibilities we never knew we could achieve. I am proud to be an alumnus of this program.

Last, but certainly not least...

To the former foster youth who participated in this study: you are an inspiration. May you continue to follow your dreams and fulfill your utmost potential now and in the future.

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Chapter 1

INTRODUCTION

One of the most prominent current policy issues in public education in California is elevating student achievement to ensure college and career readiness. Over the last few decades, researchers and policymakers have focused their K-12 reform efforts on addressing the academic needs of at-risk student populations, such as students raised in poverty, students with disabilities and English language learners. By tracking these underserved students, educators can target resources to develop high-quality instructional practices and intervention strategies that help improve the academic outcomes of vulnerable youth, including increasing their college and career readiness. However, until recently, foster students have remained largely absent from academic reform efforts in California.

In part, this is because little is known about school-aged foster youth and their needs. At the state level, California has not historically tracked their enrollment in K-12 schools, measured their academic achievements, or identified which educational services they may need for academic success (Barrat & Berliner, 2013). In schools and districts, teachers and administrators are often unaware of which students are in out-of-home care, making targeted interventions or specialized services difficult to implement.

Additionally, California foster youth face considerable personal challenges, including experiences of trauma, that contribute to lower high school graduation rates (about 60 percent) than English language learners, students with disabilities and low socioeconomic students (Barrat & Berliner, 2013). Though myriad support programs exist to help

school-aged foster youth overcome these barriers, they remain underrepresented in higher education.

Of the foster youth who do go on to enroll in college, many continue to struggle. Often, foster youth lack the social or financial support that other students enjoy while they transition from high school to college, and as a result, they experience independent living challenges before their non-foster care peers (Jones, 2012). Foster youth show low rates of persistence in higher education, even when compared to other at-risk students, and nationally, only about 3-11 percent of foster youth who enrolled in college go on to receive a degree (Frerer, Sosenko & Henke, 2013; Stuart Foundation, 2012).

As a result of the problems that foster youth experience over time in public education, an achievement gap has developed. Yet the educational supports that foster youth need are not well known, and few best practices have been developed to improve their academic outcomes (Barrat & Berliner, 2013). The state has assumed responsibility for the wellbeing of foster youth, and a critical component of this includes providing positive schooling opportunities. Identifying specific challenges that foster youth face in their education, as well as pathways across systems that help these students succeed through high school and beyond, will help deepen our understanding of how best to help this particularly vulnerable group.

A growing body of research suggests that what are commonly called "noncognitive" factors, such as perseverance and self-control, may be key in helping students achieve their academic goals. Recently, the University of Chicago Consortium on School Research developed a framework for understanding how specified

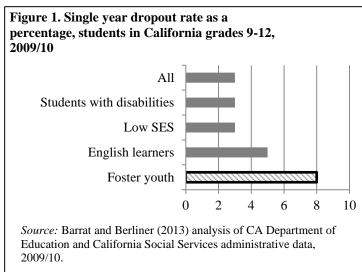
noncognitive factors relate to academic performance. Drawing upon this framework, I will survey former foster youth at two four-year public universities in California to try and identify what the students believe helped them achieve an important academic benchmark – enrollment in college. Given that students who enroll in college are likely significantly different from those who do not, and given the small sample size (33 respondents), the results of this research are not intended to be generalizable. However, this field is relatively new and is in need of exploratory research to help identify the most relevant issues for further study. Thus, this thesis hopes to provide educators and policymakers with a better understanding of how students who are statistically unlikely to achieve their academic goals, persevered.

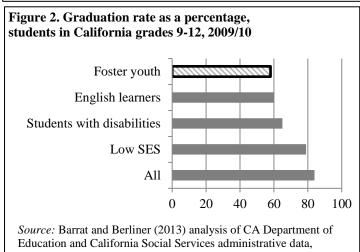
Small but Significant – Focusing on Foster Youth

The child welfare system is a fundamental part of California's social safety net, with the goal of ensuring the wellbeing and safety of children. As such, the government has an imperative to create a school context that supports the educational needs of foster youth. Yet educational policy often overlooks this group of students, likely because they make up such a small portion of the educational system. While the state investigates hundreds of thousands of cases of alleged abuse and neglect each year, few result in out-of-home care (PPIC, 2010). Less than one percent of children in California have substantiated reports of maltreatment, and the state only removes about one-third of those children from their homes (PPIC, 2010). Foster youth represent only 1 out of every 150 California students, a small population when compared to low socio-economic students (1 out of 2), English language learners (1 out of 4) and students with disabilities (1 out of

15) (Barrat & Berliner, 2013). Though foster youth are few in numbers, the academic barriers they face are great, warranting distinct attention from policymakers and educators alike.

Research suggests that foster youth face unique challenges that put them at greater risk than both the general population and other high-need students. In its landmark study





tracking the academic outcomes of foster youth in California, WestEd documented a significant achievement gap between foster students and other atrisk groups, particularly lowsocioeconomic students (SES) (Barrat & Berliner, 2013). The findings show that foster youth were more likely to be enrolled in special education, more likely to change schools, and more likely to have a documented emotional

disturbance than their low SES peers, and they were consistently outperformed in both English and math proficiency by other at-risk groups. As seen in Figures 1 & 2,

California foster youth dropped out of high school at higher rates and graduated from high school at lower rates than all other comparison groups, indicating their K-12 academic achievement is markedly worse than other at-risk students (Barrat & Berliner, 2013).

California foster youth also fare poorly at enrolling and persisting in college. The Stuart Foundation (2012) recently compared foster youth enrolled in community colleges to a group of students with similar backgrounds and characteristics. Their findings suggest foster care is negatively correlated with entrance into a community college and one-year persistence (Frerer, Sosenko & Henke, 2013). While a promising 43 percent of former foster youth enrolled in community college, they lagged behind both the general population of students (59 percent) and comparison youth (46 percent). Among all three groups, foster youth also had the lowest rate of persistence, with only 41 percent enrolling in a second year of college. These findings suggest that the academic outcomes of foster youth are significantly worse than other students, even when compared to other at-risk groups.

At Greater Risk – The Hard Path to Academic Success

The academic achievement gap between foster youth and other student groups makes sense when put into the context of the multiple and compounding risk factors that are associated with out-of-home care. The courts typically remove youth from their homes and place them in foster care because of substantiated claims of abuse or neglect. Such maltreatment can result in physical and emotional trauma that put foster youth at risk for post-traumatic stress disorder, substance use disorders, and a variety of other

mental health issues (Courtney, Terao & Bost, 2004). Research links such traumas specifically to adverse academic outcomes. A recent Washington State study of schoolaged children found that students who experienced three or more traumatic events in their childhood had three times the rate of academic failure, five times the rate of severe attendance problems, and six times the rate of school behavior problems as their peers with no known trauma (Stevens, 2012).

Once in the foster care system, these students continue to face barriers to their academic success. Unstable schooling, a lack of consistent social support, and social marginalization are all associated with being in foster care, and make achieving academic benchmarks difficult. In a three-state study of school-aged foster youth, researchers found high reports of alcohol and drug abuse (16 percent), pregnancy (33 percent), use of psychiatric medication (23 percent) and psychiatric hospitalization (7 percent) among 17 and 18 year old foster youth (Courtney, Terao & Bost, 2004). Transitioning out of care can be equally difficult, and many former foster youth find themselves unemployed, homeless, incarcerated, suffering from mental illness, or addicted to drugs and alcohol (Merdinger et al., 2005). The significant barriers foster youth can face both before and during their time in foster care, play a key role in preventing a majority of the population from achieving benchmarks of success, such as graduation from high school and enrollment in college.

College Matters

Although pursuing higher education may not be the right choice for every student, numerous benefits are correlated with earning a college degree, including higher annual

earnings and lower unemployment rates. Young adults (age 25 – 34) with a bachelor's degree earned 57 percent more than high school graduates and two times more than those without high school credentials (Kena et al., 2014). In California, a bachelor's degree is correlated with higher earnings over a lifetime, \$2.2 million for those with a bachelor's degree, compared to just \$1.3 million for those with a high school credential (Stuart Foundation, 2012). The unemployment rate in 2013 for young adults was 12.1 percent for high school graduates, compared to 8.0 percent for young adults with some college education and just 3.6 percent for a bachelor's degree or higher. This gap in unemployment rates between those with some college and those without was consistent across all age groups from 2000 – 2013 (Kena et al., 2014).

Research shows a desire to go to college is typically a large determinant of eventual educational attainment (Courtney, Terao & Bost, 2004). For example, in a national survey of ACT-tested students, 87 percent indicate they want to go to college and 71 percent of them do (Adams, 2014). Yet even when foster youth have high educational aspirations, very few successfully make the transition to college, and even fewer graduate with a degree. In a sample of former foster youth in California, 75 percent indicated a desire to go to college in high school, yet only 30 percent actually graduated from high school (Frerer et al., 2011). Nationally, only about 3-11 percent of foster youth who do go to college receive a bachelor's degree (Stuart Foundation, 2012). As a result, foster youth often miss the stability and financial security that a college degree can create. Such statistics reveal that targeted support and specialized services may be necessary to help foster youth enroll in and succeed at college.

Foster Youth in the State Policy Limelight

In recognition of the poor academic outcomes foster youth face, and in an effort to give this population the support and services they need, California recently became the first state in the nation to identify foster youth as a distinct group for the purposes of funding and accountability. Under the Local Control Funding Formula (LCFF), enacted in 2013, the state provides school districts supplemental funds for students with greater educational needs, defined as low-income students, English language learners, and foster youth (EdSource, n.d.). In return, districts must set specific goals to help improve the academic outcomes for those student groups in a Local Control Accountability Plan (LCAP). The state will use LCAPs to hold districts accountable by assessing whether their spending choices have resulted in achieving the goals outlined in the plan. Ultimately, giving authority to local districts allows them to make the spending choices that best meet their students' needs.

With spending decisions now tied to the academic outcomes of certain student groups, districts have large incentives to identify best practices that work for at-risk youth. While the challenges of many at-risk groups are already well known, few school districts in California have previously considered the unique needs of foster youth. As a result, many districts are struggling to identify appropriate services, teaching strategies, or interventions to help improve the academic outcomes of this newly identified group of students. In a review of 100 LCAPs, the ACLU of Southern California found that most plans did not set specific objectives for foster youth (Frey, 2014). Identifying the distinct challenges faced by foster youth in California's educational systems, including pathways

across systems that help these students succeed after high school, will be essential in meeting the state's new mandate.

Reaching Post-Secondary Enrollment: Noncognitive Factors May Be The Key

The LCFF is driving educators to look for specific strategies to help support the academic needs of foster youth. Most recent educational policy efforts have focused on improving academic outcomes for students through English and mathematics content, and the rigor of those disciplines. Yet there is little evidence that focusing solely on cognitive, academic skills actually leads to better outcomes for all students (Farrington et al., 2012). This approach may be even less effective for foster youth, given the documented struggle this population faces in meeting current academic expectations.

Instead, a growing body of research suggests that "noncognitive" factors may play a key role in helping foster students achieve their academic goals (Farrington et al., 2012). Such factors include the behaviors, skills and attitudes that may help a student excel academically, but are not measured in the cognitive testing that schools currently use as their benchmarks for success. These intrinsic strengths may be particularly influential for foster youth, who face considerable extrinsic barriers in attaining traditional academic goals, including a lack of familial and social support that many other students enjoy. Additionally, research has correlated the trauma that many foster youth experience with impairments to concentration, memory and language, as well as increased experiences of stress and anxiety, all of which compromises educational achievements (Romano et al., 2014). Noncognitive approaches that help foster personal

strengths can help students grow socially and emotionally and lead to improved cognitive ability in an educational setting. However, research is only just beginning to identify and correlate noncognitive factors and academic performance in foster youth. As a result, there is little consensus in the field about which noncognitive factors are most important, and how they may influence academic outcomes for this population of students.

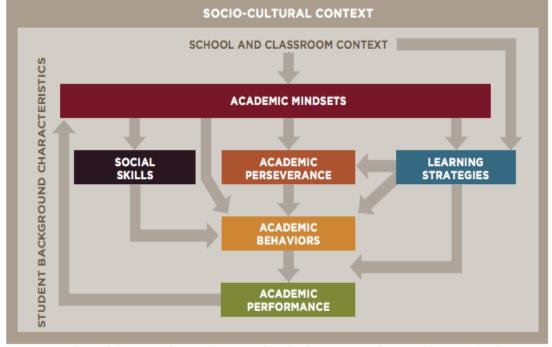


Figure 3. CCSR Noncognitive Framework

Source: Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance—A critical literature review, by Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson, & Beechum. 2012.

In the field of college and career readiness, a commonly referenced framework for understanding the role of noncognitive factors in student success was recently created by the University of Chicago Consortium on Chicago School Research (CCSR) (Farrington et al., 2012). I will discuss this framework in greater depth in subsequent chapters. As can be seen in Figure 3, the CCSR framework conceptualizes five noncognitive factors

(academic mindsets, academic perseverance, academic behaviors, social skills and learning strategies) in terms of influence on academic performance (Farrington et al., 2012). These largely internal factors are set against a backdrop of external influences, including socio-cultural context and school and classroom context. The barriers many foster youth face come from these external influences, and without the proper coping skills and learning strategies that noncognitive supports can provide, many foster youth fail to reach their potential, falling behind in school even if they may have the cognitive capability to succeed. As such, focusing educational efforts on cultivating noncognitive skills that impact academic achievement may be critical to these students' success.

Unfortunately, as noted by the authors of the CCSR framework, the term "noncognitive" does little justice to the importance such factors play in a student's academic performance (Farrington et al., 2012). The term "reinforces a false dichotomy between what comes to be perceived as weightier, more academic 'cognitive' factors and what by comparison becomes perceived as a separate category of fluffier 'noncognitive' or 'soft' skills" (Farrington et al., 2012, p. 2). Additionally, noncognitive implies a lack of thinking or intelligence is required in the utilization of this skillset, yet factors like perseverance, self-control, organization, and social skills all require an element of cognition. While the term noncognitive belies the importance and complexity of the factors it encompasses, the term is widely used in both policy and practice. As such, this paper will continue to use the term for the purposes of consistency.

Noncognitive Skills in the Classroom

Given the evidence that noncognitive skills can affect student academic performance, educators are becoming increasingly interested in whether they can teach such skills. As a result, many schools and districts across the country are introducing a focus on noncognitive factors in the classroom, alongside traditional academic content. Given the particular importance noncognitive factors may have for foster student success, California may want to consider these factors as a means of improving the academic outcomes of a group of students who have struggled to meet traditional benchmarks of academic success in a cognitive-centric learning environment.

Nationally, K-12 schools and districts have begun focusing more attention on the teachable noncognitive skills identified in the CCSR framework, including social skills, persistence, self-efficacy and self-control. A growing body of research supports this shift. Several studies have correlated a child's mental well-being with future successes, including better employment options, longer marriages, and better mental and physical health (Kahn, 2013). Research studies have begun applying growth mindset techniques in schools to emphasize effort instead of achievement. These techniques are meant to improve noncognitive skills that have been correlated with improved academic performance. Students trained with these techniques displayed greater sustained academic effort than other students did and they outperformed their peers in math (The Science: The Growth Mindset, n.d.). Research has also correlated growth mindset techniques with increased grade point average (GPA) among both Latino students and students with prior conduct problems (The Science: The Growth Mindset, n.d.).

Additional research has shown the positive impact that noncognitive factors can have on the academic achievement of at-risk youth. Noncognitive factors have been identified as key predictors of post-secondary enrollment for at-risk youth (Stecher & Hamilton, 2014). KIPP charter schools were founded to serve low-income students across the country, with a unique focus on cultivating character (a term often used to describe noncognitive traits) and positive habits (About KIPP, n.d.). The results from KIPP schools are promising for at-risk populations, with more KIPP students graduating high school (93 percent), enrolling in college (82 percent) and graduating from college (44 percent) than the national average across all income groups (KIPP Results, n.d.). Grit, a trait associated with the noncognitive factor of academic persistence, predicted better grades in high school and college for African American students, a racial group that is overrepresented in at-risk student groups (Strayhorn, 2013).

Because of these findings, a noncognitive focus in schools is becoming more and more prevalent. There are thousands of educational institutions throughout the United States that are employing social and emotional learning programs, which focus on noncognitive factors that increase the "emotional literacy" of students (Kahn, 2013). Illinois, Kansas and Pennsylvania recently passed legislation that mandates social and emotional learning in K-12 schools' curriculums (Dusenbury et al., 2014). In addition, over 70 high schools in the regions around Chicago, New York and Houston are implementing OneGoal, a program that emphasizes noncognitive factors as a means of empowering underperforming low-income students to enroll in and persist at college (OneGoal One-Pager, n.d.).

California is also participating in the nationwide shift towards improving noncognitive skills in student populations, with individual schools and districts participating throughout the state. Intellectual Virtues Academy in Long Beach is employing growth mindset teaching strategies, and some districts are incorporating measures of grit and gratitude on report cards (Smith, 2014; Kalb, 2015). Garfield Elementary in Oakland and Leataata Floyd Elementary in Sacramento have employed social-emotional learning techniques, and Prospect Sierra, a private school in El Cerrito, has implemented the RULER program, an intensive program structured around helping students Recognize, Understand, Label, Express and Regulate (RULER) their emotions in an academic setting (Kahn, 2013; RULER Overview, n.d.)

However, in spite of their growing popularity, noncognitive factors have been traditionally difficult to measure, and research on their effect on academic performance is limited (Farrington et al, 2012). There are a number of critics who question the validity of focusing on these skills in academic settings, particularly because research often conceptualizes intrinsic traits and characteristics as fixed, not learned. Additionally, many believe the noncognitive movement is a fleeting trend that shows little evidence of long-term success (Kahn, 2013). Nonetheless, efforts are underway throughout the country to combine traditional, cognitive-based teaching methods with noncognitive learning strategies in an effort to improve academic outcomes for students. Guiding frameworks, such as the CCSR noncognitive framework, can help educators and policymakers develop a deeper understanding of how myriad factors come together to affect student performance in schools. Additionally, researchers are beginning to develop tools to help

educators identify and measure noncognitive factors in their classroom. For example, psychologist Angela Duckworth at the University of Pennsylvania is currently field-testing a "character growth" report card that measures zest, grit, interpersonal and academic self-control, optimism, gratitude, social intelligence, and curiosity (Sparks, 2014). The availability of tools like this will allow districts that want to focus on noncognitive development to measure these skills in valid and reliable ways.

Purpose of This Research

Although small in numbers, there are foster youth who overcome myriad challenges associated with out-of-home care and succeed in attaining an important benchmark, enrollment in college. Learning more about the challenges and strengths this unique group faces during their educational journey can help inform policy or program development for foster students with similar goals. To that end, this thesis will use the lens of the CCSR framework to explore factors of student success in former foster youth enrolled at two California State University campuses. In Chapter 2, I will review the literature on foster youth to identify what external and internal factors are important in terms of foster student success. Chapter 3 introduces my methodology for assessing these factors in college-enrolled former foster youth in California, a survey that asks my target population to reflect on their K-12 education and account for what worked in their transition from high school to college. In Chapter 4, I report out the results of the survey in terms of the important of social support, participation in the community and noncognitive strengths. In Chapter 5, I will identify implications that the survey results

may have for California educators interested in improving foster youth academic outcomes.

This research is exploratory. I intend the survey results to provide a greater understanding of a student population we know little about: college-enrolled former foster youth. However, the survey will not establish causation or correlation because it does not determine whether the assessed factors actually influenced academic performance. Additionally, the group of students I am studying represents a small subset of the overall foster youth population, who has achieved an uncommon goal. It is possible this group of youth is significantly different from their peers in several ways that I will not explore in the survey.

Nonetheless, this research bears importance for research on foster student academic success. The educational landscape both in California, and across the country, is shifting. Noncognitive factors are becoming increasingly visible in academic literature on improving student outcomes, and educators are incorporating these factors into the classroom context. States are implementing new standards and assessments that reflect a more holistic approach to student learning, beyond standard cognitive tests. Funding priorities for K-12 in California have changed, now holding schools and districts financially accountable for increasing the academic outcomes of foster youth and other at-risk students.

As a result of this shifting landscape, it is important for educators and policymakers in California to begin to understand what factors help make foster youth more academically successful, including the role of noncognitive factors. This research

was developed to help inform the conversation, by assessing the perceptions of former foster about what helped them enrolled in college.

Chapter 2

LITERATURE REVIEW

Though the barriers to academic success for foster youth face are well documented, we know little about former foster youth who defy the odds and enroll in college. As stated in Chapter 1, of growing interest in the educational community is the role that noncognitive factors such as persistence, self-efficacy and grit, may play. Given the challenges foster youth face in both the home setting and academic setting, the personal strengths associated with noncognitive factors may be particularly important in helping these students overcome barriers to succeed. As such, the CCSR noncognitive framework outlined in Chapter 1 provides a valuable tool to explore the current literature on foster youth.

However, most of the literature on foster youth does not fit neatly within the structure of the CCSR framework. Rather, research has focused on identifying the risk factors that create barriers to success and the resilience factors that help foster youth overcome adversity to succeed. Most of these factors lie in the external, socio-cultural and school contexts identified in the framework (see Figure 3 on page 10). Little of the research has focused on the impact of internal, noncognitive factors on the academic performance of foster youth.

As such, this chapter will focus mainly on the external context that shapes foster students' educational experiences, before turning attention to the noncognitive factors identified in the CCSR framework. The chapter will break down the literature into three main sections. The first section will explore the external context that affects high school

graduation and college enrollment for foster youth. Section two reviews the literature on external factors that have helped foster youth overcome barriers and reach successful academic outcomes. Lastly, the limited literature on noncognitive factors in foster youth will be explored.

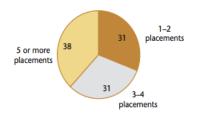
External Context – Barriers to High School Graduation and College Enrollment

Before researchers can understand which factors help foster youth succeed in school, it is important to first identify the barriers that are hindering their success. As a result, most of the reviewed literature on foster youth assesses the various factors that contribute to poor educational outcomes for this population.

Trauma. Foster youth face a number of socio-cultural barriers that prevent completion of their K-12 education, but trauma is key among those barriers. The Foster Youth Transitions to Adulthood study found that over half of respondents experienced physical abuse and nearly one-third reported a history of sexual abuse before entering out-of-home placements (Courtney et al., 2001). Even after entering the foster care system, youth may continue to face neglect, maltreatment and abuse, resulting in high levels of psychological distress (Courtney et al., 2001). According to some studies, about half of foster youth are diagnosed with a psychological disorder (Pecora et al., 2006a) or receive mental health services while in care (Courtney et al., 2001). Such trauma has been linked to adverse academic outcomes, including severe attendance problems and school behavior problems (Stevens, 2012).

Unstable Schooling. In addition to experiences of trauma at home, foster youth experience school-related barriers that contribute to their consistently poor academic outcomes. Though the goal of foster care is to provide a stable home setting that contributes to a child's well-being, many foster youth will experience multiple placement changes during their time in out-of-home care. As a result, foster students also frequently changes schools. Research suggests that unstable schooling is one of the most prominent challenges foster youth face (McNaught, 2009). The Northwest Foster Care Alumni study found former foster youth experienced an average of 6.5 placements during their time in care, with about one-third reporting 10 or more school changes (Pecora et al., 2006b). A three-state longitudinal study looking at foster youth aging out of care reported more than one-third of foster students experienced five or more school changes during foster care (Courtney, Terao & Bost, 2004). The Indiana Youth Institute (2012) has linked greater school stability with improved academic outcomes for foster youth, finding one less placement change per year resulted in twice the high school graduation rate.

Figure 4. Percent distribution of number of placements, California foster youth, grades 9-11



Source: At Greater Risk: California Foster Youth and the Path from High School to College, by Frerer, Sosenko & Henke, 2013. In California, 69 percent of foster youth had three or more placements (Frerer, Sosenko & Henke, 2013). As a result, this population experiences higher school mobility than other at-risk students. WestEd found that while two-thirds of foster students in the state did stay in the same school for the full academic year, 90 percent of low socioeconomic students enjoyed the same level of

stability. High levels of school mobility, defined as attending three or more schools during the school year, was experienced by about ten percent of foster students, but less than one percent of their low socioeconomic peers (Barrat & Berliner, 2013).

Each change in school can cause severe disruption in the student's academic experience, with delays in enrollment and difficulty transferring academic records and course credits. As a result, students may lose four to six months of educational progress with each school change (McNaught, 2009). Such mobility among foster youth has been associated with lower performance on standardized tests and other measures of student achievement (Conger & Finkelstein, 2003) and foster students have been found to be twice as likely as their peers to repeat a grade (Burley & Halpern, 2001; Courtney, Terao & Bost, 2004).

High Enrollment in Special Education. Although the purpose of special education is to provide the necessary support for students to succeed, many researchers conceptualize this group of students as at-risk for experiencing negative academic outcomes. As a result, assessing foster youth who are in special education may be important in considering their overall academic success. Numerous studies indicate between one-quarter and one-half of foster students receive special education services. Of the reviewed studies, Courtney, Terao & Bost (2004) reported the largest results, with nearly half (47 percent) of their sample of emancipated foster youth reporting placement in special education classes at least once during their education. Other studies reported more modest figures, with 36 percent of school-aged foster students (Choice, et al., 2001) and 23 percent of third grade foster students (Burley & Halpern, 2001) receiving some

form of special education services. In comparative studies, foster youth were three times more likely to be enrolled in special education than non-foster youth (Macomber, 2009; Smithgall, et al., 2004). Additionally, the classification a child in special education receives can impact the targeted programming or services they need to improve their academic outcomes. In California, foster youth with disabilities were classified as "emotionally disturbed" at a far greater rate (22 percent) than other students with disabilities (4 percent) (Barrat & Berliner, 2013).

Given the extensive barriers foster youth face while in care, it is not surprising that high school graduation rates are low. Most studies looking at high school graduation rates among foster youth show little more than half of their sample populations completed high school, either with a degree or a GED (Barth, 1990; Burley & Halpern, 2001; Courtney et al., 2005; Cook, 1991). In comparison, the national graduation rate for all students is 78 percent (Stillwell & Sable, 2013). In California, foster youth were more likely than low socioeconomic students, English language learners and students with disabilities to drop out of high school and they had the lowest graduation rate (58 percent) of all the at-risk student groups (Barrat & Berliner, 2013).

Notably, 86 percent of alumni of the Casey foster care programs graduated from high school or received a GED (Pecora, et al., 2006a). In spite of the high rates of completion in the study, the authors note that former foster youth received GEDs, rather than high school diplomas, at over three times the rate of the general population. Given the interviewees were also much older than other studies (average of 30 years old), these

findings suggest that, due to educational barriers, many former foster youth may pursue alternative means of attaining high school completion than the general population.

Tough Transitions. While the challenges foster youth face during their time in care are numerous, research shows emancipating out of the foster care system can be equally difficult. Studies indicate that former foster youth face increased risk of unemployment, housing instability, involvement with the criminal justice system, and early parenting (Courtney et al., 2001; Pecora, et al., 2006a; Barth, 1990; ACF, 2014; Daining & DePanfilis, 2007). Homelessness is a prevalent challenge for recently emancipated foster youth, with the reviewed research identifying homeless rates between 22 and 29 percent (IYI, 2012; ACF, 2014; Barth, 1990; Daining & DePanfilis, 2007). Nearly one-third (32 percent) of emancipated foster youth report using public assistance after discharge from care (Courtney, et al. 2001), and 64 percent report feeling worried about running out of money or food (Barth, 1990).

Many foster youth must transition into independent living before their non-foster care peers, and they often do so without social or financial support (Jones, 2012). This likely contributes to the severe adversity many foster youth face once they emancipate out of care. Although many support programs exist to help foster youth transition into independent living, many youth do not end up receiving necessary services to support college enrollment. In a Midwestern study of former foster youth, about one-third of respondents were not receiving an independent living service they wanted, and few reported receiving college application assistance (30 percent), financial aid assistance (22

percent) and college preparation testing assistance (17 percent) (Courtney, Terao & Bost, 2004).

Despite high aspirations among foster youth to attend college, few end up enrolling. Barth (1990) found just 33 percent of former foster youth with their high school diplomas in the San Francisco Bay Area had attended college. Similarly, in a sample of Midwestern foster youth, just 30 percent completed some college by the age of 21 (Courtney, et al., 2007). When looking specifically at California's community colleges, the Stuart Foundation found foster youth lagged behind their peers in college enrollment with 42 percent of their sample enrolled, compared to 59 percent of the general population (Frerer, Sosenko & Henke, 2013).

As just outlined, the external barriers foster youth face are numerous, making their path to graduating from high school and enrolling in college difficult. Identifying these barriers is an important first step in helping foster youth overcome adversity to achieve their academic goals. However, of growing importance in recent literature is the exploration of what contributing factors helped foster youth overcome their poor odds and succeed. Such factors of success typically include external components, such as social support, community involvement, and positive expectations of achievement, as well as noncognitive factors, such as self-esteem, sense of purpose, problem-solving skills and perseverance. Most of the research on successful former foster explores the external factors that contributed to their success.

External Factors of Success

In 2005, Merdinger and his colleagues complete a landmark effort to map the experiences of 216 college-enrolled former foster youth (Merdinger, et al., 2005). Known as the "Pathways to College" study, this seminal work provided a first attempt at better understanding factors of success among college-enrolled former foster youth. Throughout this paper the study will be referred to as the Pathways study. The research built upon preliminary qualitative interviews in which students identified internal characteristics, like strong goals and discipline as well as external factors, like educational stability, challenging curriculum and the presence of role models, as contributors to their successful enrollment in college. An extensive questionnaire was developed from those initial interviews to identify the educational history, employment history, financial support, health status, social support, homelessness, substance abuse, criminal activity, foster care experiences, skills training, personal adjustment and current life satisfaction of former foster youth at four year universities. The study found several observed commonalities in the population that were characteristic of the research on resiliency in at-risk youth, including the importance of external influences such as social support and connections with the community (Merdinger, et al., 2005). Building upon the Pathways study, researchers have continued to explore the external factors that allowed foster students to experience successful academic outcomes that are atypical for this population.

Notably, although the population of interest for this study is college-enrolled former foster youth, only a handful of other studies used this group for their sample (Day, et al., 2012; Rios & Nevin, 2009; Strayhorn, 2013; Hass & Graydon, 2009; Lovitt &

Emerson, 2008). This may be because former foster youth that have gone on to higher education are a small and unique subset of the overall population. Instead of focusing on the outliers, most studies observed broader populations of alumni of the foster care system in terms of several positive outcomes, including employment, stable housing, avoidance of early parenting and higher education. Regardless of the population of interest, the purpose of these studies was consistent, to link the positive outcomes of the individuals, with various factors that may contribute to success, including social support, involvement in the community and other external factors.

Social Support. In the Pathways study, one of the most notable external factors identified that contributed to the sample group's educational success was the strength of their social support system, a theme consistently seen in the research on successful former foster youth. Given the lack of familial support foster youth experience, positive peer interactions and social support from non-familial adults are consistently cited as the social support factors that help foster youth overcome adversity and go on to graduate from high school, enroll in college and/or attain employment (Osterling & Hines, 2006; Kirk & Day, 2011; Hass & Graydon, 2009; Lovitt & Emerson, 2008; Jones, 2012; Rios & Nevin, 2009; Daining and DePanfilis, 2007). Social support has been linked with increasing students' self-confidence and sense of purpose (Kirk & Day, 2011), and college-enrolled former foster youth indicate social support as a key contributing factor to their academic success (Hass & Graydon, 2009; Lovitt & Emerson, 2008; Rios & Nevin, 2009). In Michigan, a group of current and former foster youth gathered at a public forum to talk to policymakers about their experiences completing high school and accessing

college. The most prevalent challenge they cited was a lack of supportive relationships in their lives (Day, et al., 2012).

From the perspective of college-enrolled former foster youth, it is not just the relationship with adults and peers that is important, but also the expectations from the people in their lives that they will succeed. Hass & Graydon (2009) found 79 percent of their sample reported they not only had adults who listened to them, but adults who believed they would be a success. Respondents in the Pathways study reported feeling strong external expectations that they would attend college, as well as an awareness that failure to do so may lead to negative outcomes in their lives (Merdinger et al., 2005). College-bound expectations can be amplified when the person delivering the message is an alumnus of the foster care system. Participants in an intervention program for foster youth reporting increased motivation to pursue their higher education goals when the speaker delivering the message came from a foster care background (Kirk & Day, 2011).

Meaningful Participation in the Community. Many studies also point to participation in school and community activities as an important external factor, helping nurture feelings of belonging in youth and providing avenues for social support. In the Pathways study, 66 percent of students reported participating in extracurricular activities and 17 percent felt it was one of the most important factors in their decision to go to college (Merdinger, et al., 2005). Foster youth who participate in extracurricular activities report feeling more connected to school and to their peers, with many youth citing their involvement as an important refuge from negative experiences in their home (Day, et al., 2012; Lovitt & Emerson, 2008). Using the California Healthy Kids Survey, Hass &

Graydon (2009) found among their sample of college-enrolled former foster youth a strong commitment to help others as well as strong involvement in both school and community activities. Students who do not participate in extracurricular activities report feeling their lack of involvement was a detriment to their academic goals (Lovitt & Emerson, 2008).

Other External Factors. Research on foster youth has identified several other important factors that help these students attain their academic goals. Interviews with 24 foster youth undergraduates revealed the important role that a challenging academic environment played in preparing them to enroll in college (Rios & Nevin, 2009). Key among the author's findings was the importance of enrolling in AP classes or honors courses. The Pathways study asked respondents to rank the most important factors in their decision to attend college. As shown in Table 1, students ranked information about

financial aid, advising about college, and college preparation classes as the three most important factors (Merdinger, et al., 2005). Notably, 36 percent of students marked "other" when accounting for what was important in their transition from K-12 education to college. Such findings indicate that over

Table 1. Most important factors for foster youth going to college, Pathways study

Other experiences	36.1%
Special education	0.5%
Tutoring	2.3%
Extracurricular activities	17.1%
College preparation classes	31.5%
Advising about college	43.1%
Information about financial aid	44.9%
Which activities and experiences w important in your decision to go to	

Source: Pathways to college for former foster youth, by Merdinger, Hines & Osterling, 2013.

one-third of the college-enrolled former foster youth in the study felt there was something else, beyond the listed factors, which contributed to their enrollment in college. A

growing body of research indicates that noncognitive factors may be a key portion of what is missing from Table 1.

Noncognitive Factors

Emerging research on noncognitive factors indicates the importance that these intrinsic skills, behaviors and attitudes can play in the academic achievement of students. However, little of the reviewed research on foster youth actually assesses these factors and their impact on academic performance. In part, this may be due to a lack of consensus on appropriate and effective tools to measure intrapersonal characteristics and traits. Additionally, policymakers or educators may find fostering personal strengths a difficult programmatic goal to implement and measure in the classroom. Nonetheless, there is growing interesting in the academic community on assessing the role noncognitive factors play in the academic performance of foster youth.

In their survey of college-enrolled former foster youth, Hass and Graydon (2009) employed a variety of measures to gauge which noncognitive factors students relied on in their academic experiences. Their findings implicate the importance of sense of competence, self-confidence, and goal orientation, among other personal strengths.

Notably, nearly all of the respondents displayed confidence in their ability to do things (95 percent) and to do them well (91 percent). Most respondents had goals and plans for the future, including strong personal commitments to enroll in and finish college. Such findings indicate the importance of setting goals and sticking to them in this sample's academic journey (Hass & Graydon, 2009).

Other studies find similar results. Lovitt and Emerson (2008) completed in-depth interviews with eight college-enrolled former foster youth and found that all displayed strong academic mindsets. In other words, the students had set academic goals for themselves, and actively planned their lives around achieving those goals. Rios and Nevin (2009) identified diligence, internal motivation, perseverance and self-efficacy were all common personal strengths that academically successful former foster youth perceived as important in their journey to get college.

With recent research finding positive implications about noncognitive factors in foster youth, some support programs have begun incorporating techniques to improve upon noncognitive skills. For example, one summer support program for foster students used interventions that have been show to help cultivate noncognitive skills, and they tracked the difference in students using self-reported surveys at enrollment and at the completion of the program (Kirk & Day, 2011). The surveys showed positive increases in student perceptions of their own decision-making, assertiveness, and goal-setting skills, as well as their sense of personal efficacy and self-esteem.

As just illustrated, research on foster youth has recently turned its attention to assessing noncognitive factors and their impact on foster student performance. However, there is still much to learn about the role these factors play in improving academic outcomes for this student group. No consensus exists regarding which factors may be most important or how to best define or measure these factors. Moreover, given the variation in experiences across students, consensus may be difficult to reach. Literature on noncognitive factors also spans disciplines, with researchers in education, psychology

and sociology all using different frameworks and terminology to describe the factors that may help foster students succeed. Additionally, though the research has begun to identify several factors that may help foster youth achieve benchmarks of academic success, there is little understanding or agreement about how all of these factors may fit together. And there exists great discord among researchers about whether individual traits and characteristics can be taught or learned.

Add to the lack of clarity surrounding the literature on noncognitive factors the complexity of the external environment that foster youth face in their academic journey and it becomes clear that the research on foster student success is complex and difficult to navigate. For educators and policymakers in California, who are trying to improve the academic outcomes of foster youth, the research may be particularly daunting. A cohesive framework that incorporates both the external factors that are important for foster students, as well as the noncognitive factors that are becoming increasingly important in the literature, would help provide interested stakeholders a roadmap through the various factors that may impact foster student success.

The CCSR Framework. As mentioned in Chapter 1, the University of Chicago Consortium on Chicago School Research (CCSR) noncognitive framework provides this helpful lens (Figure 5). The framework assess five categories of key noncognitive factors, set against the backdrop of external factors that the literature on foster youth has identified as important, including socio-cultural, school and classroom contexts. As illustrated earlier in this chapter, the bulk of research has focused on these external factors affecting foster student academic achievement. Further research on the five

cognitive factors in the CCSR framework would help provide a more comprehensive understanding to educators and policymakers about both the internal and external factors that provide pathways to academic success for foster youth.

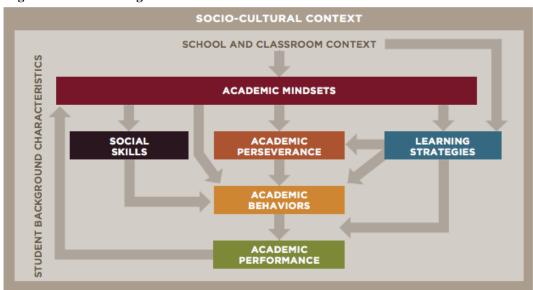


Figure 5. CCSR Noncognitive Framework

The framework's five categories for noncognitive factors are academic behaviors, academic perseverance, academic mindsets, learning strategies and social skills (Farrington et al., 2012). Academic behaviors include regularly attending class, paying attention, participating in class, and completing homework. As noted by the authors of the framework, academic behaviors are key because "virtually all other noncognitive factors work through academic behaviors to affect performance" (Farrington et al., 2012, p. 8). Academic perseverance includes the traits and characteristics that drive a student to complete school work, despite possible obstacles or distractions. Research suggests increased academic perseverance can lead to improved academic behaviors, which leads to better academic performance (Figure 6). Academic mindsets are the attitudes and

beliefs one has about oneself that affect academic performance. Academic mindsets incorporate several psychological theories including social learning theory, attribution theory, expectancy-value theory and self-efficacy (Farrington et al., 2012). Research suggests that academic mindsets can increase a student's perseverance, which leads to improved academic behaviors, which leads to better academic performance (Figure 6).

Learning strategies are the methods or tactics a student uses to help them

maximize their academic performance.

Figure 6. Noncognitive factors and their relationship with academic performance student's study skills as well as help them set

goals, manage their time effectively, and recall

facts. Learning strategies can help improve

academic perseverance, behaviors and

performance. The last noncognitive factor in

ACADEMIC MINDSETS

ACADEMIC PERSEVERANCE

ACADEMIC BEHAVIORS

ACADEMIC PERFORMANCE

the framework is <u>social skills</u>. Social skills encompass the interpersonal skills, such as empathy, cooperation and assertion, that help improve a student's social interactions with peers and teachers alike. Though social skills have not been found to be directly related to

academic performance, research has shown an indirect relationship, through improving academic behaviors, as depicted in Figure 7.

academic behaviors and performance.

SOCIAL SKILLS
Interpersonal Skills,
Empathy, Cooperation,
Assertion, and
Responsibility

ACADEMIC

ACADEMIC

Figure 7. Social skills relationship with

Focusing on Academic Perseverance. Future research on all the noncognitive factors outlined in the CCSR framework among foster students would help provide much

needed insight to the educators in California tasked with improving this group's academic performance. Of particular interest may be the role of the factor academic perseverance. According to the authors of the CCSR framework, an academically perseverant student behaves, "in an engaged, focused, and persistent manner in pursuit of academic goals, despite obstacles, setbacks, and distractions" (Farrington et al., 2012, p. 20). Given the extensive barriers foster youth often face during their academic journey, perseverance may be one of the most important noncognitive factors to help these students succeed.

A key component of academic perseverance is a trait called "grit," a term that has gained popularity among the press in recent years (Farrington et al., 2012). Angela Duckworth and her colleagues have been focusing their research on grit for the past several years, developing a "grit scale" that is used as a predictive measure of achievement (Duckworth et al., 2007). The scale measures an individual's ability to set long-term goals and maintain a commitment to those goals in spite of setbacks. As noted by Duckworth (2007), gritty individuals maintain "effort and interest over years despite failure, adversity, and plateaus in progress" (Duckworth, et al., 2007, p. 1088). Of interest in the grit research is the finding that this noncognitive trait predicts success even when all other background characteristics and cognitive abilities are controlled. Grit was associated with higher levels of education in a national sample of adults and higher GPAs among Ivy League undergraduate students (Duckworth et al., 2007). The latter findings suggest that gritty individuals may outperform their more talented peers in academic settings (Duckworth et al., 2007). The research also implies that achieving long-term goals may not be solely attributable to an individual's talent, intelligence, or the

demographic challenges they face. Sustained effort over time may be equally, if not more, important. Given the obstacles many foster youth must overcome to achieve their long-term academic goals, grit may be uniquely significant for foster students.

Although applying the grit scale to at-risk populations such as foster youth seems logical, most of the research has instead focused on assessing grit in high-achieving groups. In a study of first-year West Point cadets, grit predicted retention in the program better than SAT scores, class rank, demonstrated leadership ability and physical aptitude (Duckworth et al., 2007). In the national spelling bee, grit predicted better spelling performance (Duckworth et al., 2010) and at the Olympic Training Center in Colorado Springs, elite athletes reported very high mean grit scores (3.9 out of 5 points) (Poczwardowski et al., 2013).

Only one reviewed study applied the grit measure to a traditionally at-risk group. Strayhorn (2013) used the grit scale to predict academic achievement in college-enrolled black males. He used the grit scale in conjunction with traditional measures such as high school GPA and standardized test scores to assess whether grit added predictive validity on several academic outcomes. Strayhorn's (2013) findings indicated that grittier black male collegians earned higher grades in college and high school, as well as higher scores on standardized tests. This research suggests using the grit scale in former foster youth enrolled in college may help increase our understanding of what helps a traditionally vulnerable group reach successful outcomes. However, more research is needed to assess whether or not academic perseverance can help narrow existing achievement gaps among students.

While research suggests that perseverance can help improve student academic outcomes, it is important to note that the traits in this category of noncognitive factors are often conceptualized in the literature as innate, or fixed. Moreover, grit, the specific trait of interest, has mostly been assessed from the standpoint that it is consistent across a person's lifetime (Duckworth et. al, 2007). Given this context, many researchers question whether classroom interventions or teaching strategies can affect academic perseverance in students. According to the authors of the CCSR framework, the answer is yes. While perseverance may be a stable personality trait that fluctuates little over a person's lifetime, there is research that suggests students can learn to act more perseverant, even if it is not within their nature to do so (Farrington et al., 2012). Additionally, the framework conceptualizes *academic* perseverance as perseverance *set within the classroom context*. There is ample evidence that classrooms can affect student's mindsets and that teachers can provide learning strategies, both of which influence a student's tendency to persevere within an academic context (Farrington et al., 2012).

Conclusion

In California, policymakers and educators are now considering how they can improve the academic outcomes of foster youth. An important part of their consideration may be how schools and districts can create a K-12 environment that supports a foster student's ability to attain a high school diploma and enroll in college. There exists strong evidence that external influences such as social support and involvement in the community can help foster youth overcome obstacles to achieve successful academic outcomes. Emerging research is beginning to assess the role that internal traits and

characteristics, also known as noncognitive factors, may play. Yet to date, little of the research looks specifically at college-enrolled former foster youth to explore which factors, either internal or external, most helped them attain academic success.

Additionally, few of the studies looked at academic perseverance specifically, even though logic suggests this may be a particularly important noncognitive factor for foster youth.

The purpose of this study is to explore academic perseverance, among other factors of success, to add to the emerging research on former foster youth enrolled in college. By surveying this population on a number of factors identified in the literature, I hope to increase our understanding of what helps some California foster youth achieve a statistically unlikely accomplishment: enrollment in college. The CCSR framework provides a helpful starting point for incorporating noncognitive factors into the equation of foster youth success. Additionally, the framework has important implications for educators who are looking to better understand how schools and classrooms can affect noncognitive factors to improve academic performance.

However, this survey provides only a limited look at what factors may affect foster student academic outcomes. It is not causal research, and as such, results will not establish a link between the observed factors and this population's academic success. Neither will the results be generalizable. Very few foster youth matriculate into higher education, and there may be fundamental differences between those students that enroll and those that do not. In spite of its limitations, this survey will provide a starting point for future research to explore a population of students we know little about in California:

college-enrolled former foster youth. Additionally, the results will help provide a greater understanding of what factors may contribute to academic success in foster youth, with possible implications about teaching strategies or interventions that will help students with similar academic goals.

Chapter 3

METHODOLOGY

The reviewed research on foster youth suggests that there are a number of factors, both internal and external, that influence their academic performance. The bulk of the research focuses on external factors that can either support or inhibit a foster student's academic success. Though external factors are clearly important, a growing body of research recognizes the influence a set of internal, noncognitive factors may have on foster youth academic performance. This study will use a survey to explore both external and internal factors in a group of foster youth who have met an important academic benchmark, enrollment in college, to learn more about these students and how they account for their success.

Given the limited time and resources available for this research, I could not include all of the factors that may affect academic performance. Rather, I selected a few key factors from the literature to incorporate in the survey. Primarily, the survey focuses on factors that can arguably be influenced through programmatic interventions or teaching strategies, including opportunities for youth involvement in the community, adult or peer support outside of the home, and fostering perseverance (as influenced by the classroom or school environment). Though this research will not establish causality among the assessed factors and actual academic performance, it will help identify which factors may have contributed to academic success in the sample population, by capturing the perceptions of former foster youth about their own academic achievement.

Research Design

In order to explore factors of success in college-enrolled former foster youth, I distributed a 19-question survey to participants of foster youth support programs at two public universities in Northern California (please see the full survey in Appendix A). The survey was administered electronically through a web-based program called Survey Monkey. The survey is broken into three main categories identified as key factors in the literature: social support, participation in the community and noncognitive factors (with a focus on academic perseverance). A combination of closed and open-ended questions are included to gauge respondents' perceptions about what helped them transition from high school into college. Foster care background questions are included to help assess whether the sample population differs dramatically in terms of a few key risk factors than other foster students in California.

Sampling

Non-probability, purposive sampling was used to select students that meet the study requirements (enrolled in a four-year institution and former foster youth). The sample consists of students participating in foster youth support programs at two northern California State University (CSU) institutions. These programs are typically called "Renaissance Scholars" or "Guardian Scholars," and they provide supportive services to former foster youth in higher education settings. Several universities in California provide these support programs for foster youth and each offer similar services to their participating students. I selected the two universities for this survey because of their geographical location in cities that have proportionately high numbers of school-aged

foster youth in comparison with the rest of the state. With just 10 percent of K-12 school districts enrolling two-thirds of California's foster youth population, I anticipated universities situated near those districts would have a larger college-going foster youth population to draw from. In addition, the universities both have well-established programs that seem representative of such programs throughout the state. The staff members working in the programs were easy to communicate with and provided a reliable way to identify my target population and communicate with them via email. It is possible that because both universities are situated in the northern half of the state, the population of students in the programs have different demographics or characteristics than if the sample had been drawn from universities in both northern and southern California. However, there is no indication that the selected institutions (or programs) drastically differs from other four-year institutions in California that provide these programs for former foster youth.

Although the selected programs consist almost entirely of foster youth, one program does allow participation by youth who are homeless. To address this issue, the survey asks students to report on the amount of time they spent in foster care as a validation of their inclusion in the sample. I excluded respondents who did not indicate having spent time in foster care, or who omitted answering this question, from the survey results.

Data Collection

The California State University, Sacramento Institutional Review Board (IRB), granted me permission to distribute the survey to human subjects. I sent an informational

letter to administrative staff in the support programs soliciting their help in informing student members about the survey. Staff distributed the survey to members via email. The survey was available for two and a half weeks online and took about 15 minutes to complete. I distributed reminder emails once a week via the administrative staff contact, with a final reminder on the last day of the survey.

Included in the survey was a consent form informing students of the purpose of the survey, so they could decide whether they wanted to participate. The survey was voluntary and anonymous, and I offered no incentive for participation. I distributed the survey to 100 possible respondents and 42 surveys were completed. Four respondents did not qualify for the study due to a lack of reported foster care background. I disqualified an additional five individuals due to non-response on key questions. The total response rate was 33 percent, on par with the average response rate of 35 percent for web-based surveys (Singleton & Straits, 1993).

Nonresponse bias is a common issue in survey sampling, particularly when the response rate is low. Specifically, bias occurs if the answers provided by respondents differ in meaningful ways from the answers non-respondents would have provided (Singleton & Straits, 1993). Such bias may be present in my findings. I explicitly stated the purpose of the survey, to explore factors of success in former foster youth, in the email asking for participation. As a result, students who may be struggling academically, or who do not perceive themselves as "successful", may have avoided responding to the survey. Such nonresponse bias may skew the data towards overrepresentation of academically successful students. Additionally, nonresponse bias may contribute to over-

reporting of success factors in the population. Those respondents who did not identify with the factors outlined in the survey may have chosen not to complete the survey. As such, results should be interpreted with caution.

Instrumentation

I designed the survey to assess both external and internal factors that may contribute to academic success in former foster youth enrolled in college. Areas covered include social support, participation in the community and noncognitive factors.

Assessing External Factors: Social Support and Involvement in School or Community. The literature measures social support and involvement in the community in several different ways, and often, studies measure only one component, without measuring the other. I chose to adapt questions from the California Healthy Kids Survey (CHKS) because it assesses both social support and community/school involvement in one series of questions. Additionally, Hass and Graydon (2009) used the CHKS effectively in their research on former foster youth, and given its widespread use in California K-12 institutions, there was California-specific data that I could use to provide context to my survey results.

CHKS is a research tool developed by WestEd for the California Department of Education, consisting of several different modules that measure risk, resilience and protective factors in students. The tool is typically administered to students in Grades 5-12, but has been adapted for use in older population (Hass & Graydon, 2009). For my survey, I only used only items from the Resilience Module. The CHKS Resilience Module assesses several different environmental factors and internal traits that are

positively associated with youth development and academic success, setting it apart from most other student surveys that focus solely on risk factors and problem behaviors (Hanson & Kim, 2007). As seen in Figure 8, the module conceptualizes resiliency as an

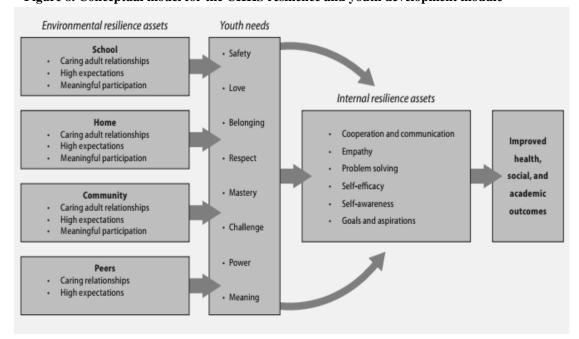


Figure 8. Conceptual model for the CHKS resilience and youth development module

Source: Measuring resilience and youth development, by Hanson & Kim (2007).

interactive process between several of the factors identified in the literature review.

The Resilience Module consists of 42 questions using a 4-point Likert scale. My survey only selected a few specific questions from the tool, in an effort to keep the length of the survey manageable and increase likelihood of students' participation. The selected questions were based on portions of the Resilience Module that assess caring adult relationships, caring relationships with peers, high expectations, and meaningful participation in the school and community. These factors are assessed by asking students to indicate how true statements are, and then assigning a point value to their responses as follows:

- 4: Very much true
- 3: Pretty much true
- 2: A little true
- 1: Not at all true

Scores are averaged across participants and students are classified as "High" (percent of students scoring 3 or higher), "Moderate" (percent of students scoring at least 2 but no more than 3) and "Low" (percent of students scoring below 2) (WestEd, n.d.). This survey will employ a similar scoring scale to assess the level of social support and extracurricular participation among respondents.

Assessing Noncognitive Factors: Grit. As noted in the literature review, there are five key noncognitive factors in the CCSR framework that influence student academic performance: academic behaviors, academic perseverance, academic mindsets, learning strategies and social skills. Given the many barriers foster youth face, academic perseverance may be particularly important for this student population. Because grit has been identified as an important component of academic perseverance, I chose the Grit Scale, developed by Duckworth and her colleagues (2007). The original scale was a 12-point self-report scale that measures trait-level perseverance and passion for long-term goals. The scale was later modified by Duckworth and Quinn (2009) to produce a more efficient 8-point scale, the Grit-S. My survey uses the shorter Grit-S Scale.

The Grit-S questionnaire measures two factors, consistency of interest and perseverance of effort, to ascertain a total grit score. The questionnaire uses a 5-point Likert scale ranging from 1 (*not like me at* all) to 5 (*very much like* me). Each response is given a point-value and the respondent's total points are divided by eight to ascertain their total grit score. Respondents can receive a maximum score of 5 (*extremely gritty*)

and a minimum score of 1 (*not at all gritty*). During the development of Grit-S, the questionnaire showed internal consistency, predictive validity, consensual validity, and test-retest stability.

Although previous studies have used grit as a predictive measure, due to time and resource limitations this research was unable to use the tool this way. Instead, I used the grit scale descriptively, as was done in Poczwardowski et al.'s (2013) assessment of resident-athletes at the Olympic Training Center in Colorado Springs, where they calculated the average grit score for the group, as well as the subscale scores for consistency of interest and perseverance. Additionally, the grit scale has not been tested much in at-risk populations. Of the reviewed studies, only one used the Grit-S measure in at-risk youth (Strayhorn, 2103). Other studies focused primarily on high-achieving populations, such as Olympic athletes, spelling bee champions, and undergraduate students at elite universities. While sustained effort over time is certainly important in achieving rare goals like competing in the Olympics, it may be just as important in at-risk populations who have set the goal of enrolling in college. Incorporating the Grit-S measure in this study, though limited in its generalizability, will hopefully start a conversation for future researchers interested in assessing grit in at-risk youth generally, and foster youth specifically.

Assessing Other Noncognitive Factors. Although I chose only the grit scale to measure noncognitive factors specifically, I did want to include a way for respondents to account for other noncognitive factors that may have helped them achieve enrollment in college. To accomplish this, I modified a question from the landmark Pathways study. As

noted in the literature review, the Pathways study asked college-enrolled former foster youth what factors were most important in their decision to go to college, and 36 percent of respondents selected "other". These findings suggest the population clearly attributes

Table 2. Survey question assessing important factors in foster students' decision to go to college

Which of the following were important in helping you transition to college? (please mark all that apply)				
a.	Information about financial aid			
b.	Advising about college			
c.	College preparation or AP classes			
d.	Extracurricular activities			
e.	Social support (mentors, family, friends)			
f.	Personal strengths (for example self-motivation, adaptability, resilience			
g.	Other (please specify)			

their decision to go to college to factors beyond those listed in the table. I modified the Pathways list and included it in my survey, with the additional option of "personal strengths" (Table 2). I did not use the term noncognitive because it can be confusing and misleading,

and I felt personal strengths adequately described the traits and characteristics from the CCSR framework. Although "personal strengths" does not allow specificity about what noncognitive factors may have been important for the student, it can serve as an indicator of whether or not this population considers those factors important in general. I also added "social support" to the Pathways list, a major factor from the literature that may also account for the high percentage of respondents who answered "other".

Open-ended questions were included at the end of the survey to allow detailed responses about the people or experiences that helped these students on their academic journey. From these questions, I hoped to identify themes about what college-enrolled former foster youth identify as important factors that helped them get to college.

Analysis Method

To analyze my survey results, I will rely primarily on descriptive statistics.

Univariate analysis, including average grit scores and general levels of social support and participation in the community, will help me understand more about a group of students that are the "exception to the rule." From this analysis, I hope to identify which factors the group appears to have in common, and what respondents identify as the most important factors in their journey to college. I will also use statistics from the literature review to draw limited comparisons from my sample to what we know about foster youth in California in general, mostly in terms of their experience in foster care. This will allow me to identify whether this group is significantly different from their foster care peers in terms of the number of placements, gender, race, and other background variables. Lastly, I will look for themes in the qualitative responses to see if respondents' descriptions of what helped them on their academic journey support (or stand in discord) with their responses on other survey questions.

Limitations

This survey is notably limited in its ability to capture all of the factors that may help (or hinder) a foster student's academic success. To minimize risk for the respondents, the survey does not ask in-depth questions about trauma, or the student's experiences in foster care. Additionally, respondents were not asked to assess other significant risk factors such as contact with the criminal justice system, enrollment in special education, or drug and alcohol use, to name a few. As noted previously, while there are several factors identified in the literature review that impact foster youth

academic performance, only a few were selected and tested in this population. This was done in order to keep the survey manageable in size and to encourage participation from respondents. As a result, this survey will not assess many of the barriers that foster youth face in graduating from high school and enrolling in college, nor will it capture the breadth of internal and external supports that may help a student overcome adversity and excel academically.

The use of a survey to gather data presents additional limitations for the research, including sampling errors, response bias, and nonresponse bias. Sampling errors are likely present due to the small sample size and the sampling methods used. Response bias may also be present, meaning respondents may have selected answers that implicate success, because they know that was the focus of the research. The survey also relies on self-reported data, which may mean that respondents over-emphasized certain qualities and traits that they believe are desirable. Nonresponse bias is also likely an issue, meaning the students who chose to participate may be distinctly different from those who did not respond (Singleton & Straits, 1993).

Because of the limitations noted throughout this section, the findings of this research should not be generalized and causality will not be established. Rather, the survey is meant to help explore a unique group of individuals that we know little about, with the hopes of identifying factors that may help foster students with similar goals. The foster youth that enroll in college represent a small and unique population. They may be fundamentally different from their counterparts who do not go to college. Just as important, foster youth who do get to college likely have uniquely different experiences

from one another. Although the results of this survey may have important implications for future research, and might provide insight to educators or lawmakers about possible education interventions for this population, this research is limited in scope and is solely meant to capture a better understanding of this small and unique population.

Chapter 4

ANALYSIS

The literature review outlines the external influences and internal strengths that may help foster youth overcome the adversities they experience in their lives to matriculate into, and succeed in, college. I designed the survey around these factors to assess which are present among former foster youth enrolled in college, and to which factors they attribute their success. This chapter will report on the results of the survey, looking for themes within the responses provided by the 33 participants. I first report on the background characteristics of the sample and a few key external barriers to success, including the average number of foster placements, average length of time spent in foster care and K-12 grade retention. Then, I report on external factors of influence, including whether respondents experienced social support in their lives and participated in their school or community. Results include the perceptions of students about which of these factors helped them matriculate into college. Finally, I turn to the internal, noncognitive factors that are central to the CCSR framework. I report my findings on the noncognitive factor the survey explicitly measured, academic perseverance, and then will describe whether participants attribute their successful enrollment in college to noncognitive factors generally.

One key objective of the survey was to better understand how college-enrolled former foster youth account for what worked in their lives. By asking respondents openended questions about the people and experiences that aided their educational journey, I hoped to identify themes regarding what students perceived as the most critical elements

of support. The majority of participants (79 percent) provided responses to these questions, and I used these answers to supplement the survey's findings. All of the quotes used in this section are derived from the 26 open-ended responses.

Background Characteristics

The demographic information about my respondents is presented in Table 3, alongside the findings of the Merdinger (2005) Pathways study. The landmark Pathways study provides one of the most comprehensive looks at college-enrolled former foster youth in the literature, and is therefore included to provide comparative statistics about my sample. From what is known about foster youth in California, my sample is not representative in terms of gender or race. The respondents were predominantly female (81 percent) and a relatively large percentage were African American (41 percent), as compared with California foster youth in high school who are 56 percent female and 33 percent African American (Frerer, Sosenko & Henke, 2013). However, the Pathways study, which also looked at college-enrolled former foster youth, found similarly high rates of enrollment among females (77 percent) (Merdinger et al., 2005).

The respondents of this survey are largely comparable to the respondents in the Pathways study. The distribution across grade levels is fairly similar and the percent of students that attended community college before enrolling in a four-year institution is nearly identical. The large percentage of juniors in both studies is likely because over half of the respondents in each study first attended a junior college. These findings indicate the important role these institutions may play in providing access to higher education for foster youth.

Category	Number	Percentage	Pathways Study
Gender	n=32		
Female	26	81	77
Male	5	16	23
Other	1	03	
Race	n=32		
White	7	22	39 ¹
African American	13	41	23
American Indian/Alaskan	0	00	01
Hispanic or Latino	6	19	22
Asian/API	2	06	08
Bi-Racial	2	06	
Other	2	06	
Grade in College	n=33		
Freshman	5	15	18
Sophomore	3	09	15
Junior	13	40	26
Senior	4	12	27
Super Senior	7	21	
Graduate Student	1	03	14
Attended Community College	n=33		
Yes	17	52	53
No	16	48	47
Current GPA	n=33		
2.0 or less	3	09	Average = 2.98
2.1-2.5	7	21	
2.6-3.0	18	55	
3.1-3.5	4	12	
3.6-4.0	1	03	

¹The Pathways study includes additional race categories not presented here. As a result, reported percentages do not equal 100.

My survey asked respondents to report their GPA by selecting from given ranges.

The majority of participants (55 percent) reported a current GPA of between 2.6 and 3.0.

Though the Pathways study reported GPA as an average (2.98), and the results between

the two studies cannot be directly compared, the findings of both studies indicate the majority of participating students are carrying a GPA of just under 3.0, which translates to an average grade of B or B- in classes. The GPA findings indicate the former foster youth who responded to the survey are exceeding the minimum grade requirements of the institutions they attend.

External Barriers

As documented in the literature, there are several external barriers that can hinder academic success for foster youth, including experiences of trauma, criminal history, mental health problems, special needs at school and more. In order to keep the survey a manageable length, I excluded many external factors from the literature. Additionally, the barriers listed above are sensitive topics, which I chose to omit from the survey to minimize risk to participants. Though not exhaustive, the survey does measure a few major external factors that may influence the academic achievement of foster youth: the amount of time the youth spent in care, the number of placements they had, and whether or not they repeated a grade.

Category	Number	Percentage
Number of Placements	n=32	
1-2 placements	12	37
3-4 placements	7	22
5 or more placements	13	40
Average	7.22	
Range	1-40	
Years in Care	n=31	
Average	7.58	
Range	1-18	
Grade Retention (retained for at least one grade)	n=32	22

Table 4 summarizes these findings. Given that the survey respondents are enrolled in college, a goal that many of their foster peers do not attain, I wanted to assess whether aspects of their foster care experience differed dramatically from other foster youth in California.

Two significant predictors of poor academic outcomes among former foster youth are the time they spent in care and the number of placements they experienced. The population I surveyed appears to have no more stability in their life in terms of these factors than other California foster youth. The number of placements they experienced while in care is comparable to that of other high school foster youth in California in which 31 percent experience 1-2 placements, 31 percent experience 3-4 placements, and 38 percent experience 5 or more placements (Frerer, Sosenko & Henke, 2013). Notably, 25 percent of participants experienced very frequent placement changes, reporting more than 10 placements during their time in foster care. One respondent experienced 20 placement changes in just six years in foster care. Another respondent reported 40 placement changes in 16 years. Although the Indiana Youth Institute (2012) correlates one less placement change per year with twice the high school graduation rate, these respondents show that even with extraordinary instability at home, they can overcome the odds and enroll in college.

Respondents to the survey spent more time in the foster care system (average of 7.5 years) than is typical for other foster youth in California. According to the Public Policy Institute of California (PPIC), 21 percent of California foster youth spent more than five years in the system, compared with 52 percent of respondents to this survey

(Danielsen & Lee, 2010). However, this is likely explained by the sample from which respondents were drawn. The PPIC report shows that a significant portion of youth spend less than one year in care (35 percent). Although some of these students likely end up enrolling in college, they may not identify themselves as foster youth given the limited time they spent in foster care. I derived my sample from programs that support self-identified foster youth, and as a result, I likely did not capture the portion of students who are attending college but spent less than one year in the foster care system.

Survey respondents did experience less grade retention than is typical of California foster youth. Although research suggests that increasing changes in placements can lead to a higher likelihood of grade retention, I did not observe this in my respondents. Just seven (22 percent) indicated that they had to repeat at least one grade, with five of those seven respondents repeating a grade in elementary school. This statistic is relatively high when compared to general populations of youth in California. For example, in Los Angeles, just 7.5 percent of students were retained before the third grade (PPIC, 2011). However, in comparison to the 83 percent of California foster youth who are retained before third grade, the respondents of my survey are doing relatively well (LAO, 2009). Given that the survey participants experienced the same amount of placements on average as other foster youth, but had less grade retention, there may be protective factors that this population is accessing to help them succeed in an academic environment in a way that is unusual for foster youth. The literature review suggests that these factors may include social support, participation in the community or noncognitive traits such as grit. Since this thesis does not examine issues related to cause and effect,

these statements are speculation. Additional research is necessary to determine if the relationship between these protective factors and academic success is causal.

External Factors of Success – Social Support

"Looking back I am grateful for every person that has been with me through the journey."

Of the 33 respondents, 71 percent indicated social support was important in their transition to college, and 27 percent indicated it was the most important factor. Social support came from a variety of sources, primarily teachers and counselors, social workers, foster family members and biological family members. The type of support received aligned into two main themes: informational support and personal support.

Interestingly, much of the personal support students received seems to relate to a positive academic mindset (a noncognitive factor from the CCSR framework) that helped them succeed.

Sources of Social Support: Adults. The survey assessed the presence of adult social support by modifying questions from the California Healthy Kids Survey (CHKS), a survey that is regularly administered to K-12 students across California. The CHKS asks students their perceptions of key resilience indicators, including caring adult relationships and high expectations, in both the school and community environment. In order to keep the length of my survey manageable, I selected only a few items from the CHKS, and did not distinguish between support coming from the school environment and support coming from the community environment. As a result, my survey findings are not directly comparable to the CHKS findings for students across the state. Nonetheless,

the 2011-2013 CHKS data for students in grade 11 does provide helpful context within which I can interpret my results.

As noted in Chapter 3, CHKS assesses social support by asking K-12 students to indicate how true statements are on a 4-point Likert Scale, assigning a point value to their responses as follows:

- 4: Very much true
- 3: Pretty much true
- 2: A little true
- 1: Not at all true

Students scoring 3 or higher are classified as "High", students with a score of 2 are "Moderate" and students scoring below 2 are "Low" in terms of their perceived social support (WestEd, n.d.). I use the same scoring system to present my findings.

Table 5. Social support from adults

During high school, there was a parent, guardian or some other adult...

	Number	Percentage	Level of Support
who expected me to attend college	n=33		
Very much true	14	42	High - 57%
Pretty much true	5	15	Medium - 12%
A little true	4	12	Low - 30%
Not at all true	10	30	
who talked to me about my problems	n=33		
Very much true	10	30	High - 54%
Pretty much true	8	24	Medium - 9%
A little true	3	9	Low - 36%
Not at all true	12	36	
who always wanted me to do my best	n=32		
Very much true	14	44	High - 63%
Pretty much true	6	19	Medium - 19%
A little true	6	19	Low - 19%
Not at all true	6	19	

As seen in Table 5, the majority of survey respondents perceived high levels of adult support in their lives during high school, in terms of caring relationships and high

expectations. Over half of the respondents thought it was very much true or pretty much true that there was an adult with whom they could discuss their problems, a proxy for measuring caring adult relationships. Respondents reported similar levels of support when it came to high expectations, with 57 percent believing it was very much true or pretty much true that an adult expected the student to attend college, and 63 percent believing an adult wanted them to do their best.

These findings are similar to the level of support reported by grade 11 students on the CHKS in 2011-2013 (WestEd, 2014). In the CHKS results, 63 percent of students perceived high levels of caring adult relationships and 64 percent felt high expectations in their community environment. In the school environment, high levels of support were reported by 36 percent and 46 percent of students, respectively. However, in comparison to the findings of Hass and Graydon (2009), the levels of social support in my sample are low. Hass and Graydon found 79 percent of college-enrolled former foster youth had an adult who listened to them and believed they would be a success. The difference in findings may be attributable to their sample, which only included alumni of a high school support program for foster youth. Required enrollment in a program that offers mentorship, among other supportive services for high school foster youth, would likely skew their findings towards greater reported rates of social support in high school.

Over half (58 percent) of the respondents who cited individuals as sources of support cited teachers, counselors or other mentors whom they met in their school environment as key in helping them enroll in college. As noted by one respondent, "sometimes their job descriptions don't cover exactly how much they give to students, or

they simply go above and beyond whatever is normally expected to help students succeed." Given the instability that many foster youth face in their home lives, school may provide a stabilizing environment from which this population can draw support.

The next most prevalently cited source of adult support came from the foster care system, with nine respondents (38 percent) citing either social workers, foster family members or both as the most important people helping them transition to college.

Notably, the individuals citing foster family support also had significantly fewer placements than the average respondent did—three placements as opposed to seven.

Although these students attributed their transition to college to the support of their foster family, the relative stability of their home environment may make them an outlier in terms of the experiences many other foster youth face.

The third main source of adult social support came from biological family members. Seven respondents on the open-ended questions (29 percent) indicated that they relied on support from their biological family in their transition from high school to college, though none directly cited their biological mother or father as sources of support. Rather, three of the respondents cited siblings as their main source of support, and one respondent described the importance of their grandmother and aunts.

Sources of Social Support: Peers. While peer support was as equally prevalent as adult support among respondents, few participants cited individuals from their peer group as important in their transition to college. About half of respondents thought it was very much or pretty much true that they had peers who cared about them, talked with them about their problems, and helped them during high school. But just 3 out of 26

respondents (12 percent) cited peers among the individuals who helped them succeed. In part, this may be because students look to adults, or individuals with more experience, to help them get into college. Peers, by their very definition, may be in the same situation as the student respondents, and therefore unable to provide meaningful advice or guidance in terms of enrolling in college. This speculation is supported by one respondent, who indicated high school counselors were the most important people in her transition to college because "they already done it [sic] so they know how to help with more information and with questions."

Type of Social Support. Comments from the open-ended questions revealed two main types of social support that respondents received from adults and peers in their life: informational support and personal support. Informational support includes the practical advice and information necessary to enroll in college, including applying for the FAFSA, learning how to budget, preparing for college classes, working on class schedules, and providing information on grants or scholarships. Such support is clearly important to this sample of students. When asked which factors were important in the student's transition to college, information about financial aid (87 percent of respondents) was the most frequently cited answer, followed by advising about college (84 percent). When asked to identify the most important factor, 26 percent of respondents selected one of these two factors. As one respondent noted, "[advisors/counselors] were beneficial because without them, I would have had no idea where to begin, what classes to take, how to get in touch with services offered at the college level." Respondents primarily received informational

support from teachers, counselors and social workers. Just one respondent received informational support from their foster family/biological family.

Personal support was the second type of support respondents frequently cited as important in their transition from college. Such support includes people providing encouragement or a belief that higher education is possible. Personal support came from a variety of sources, including foster parents, biological family, teachers, social workers and members of support programs geared towards foster youth. Notably, the research on noncognitive factors identifies the types of personal support respondents mentioned as key in developing an "academic mindset" that helps students achieve academic goals (Farrington et al., 2012). An academic mindset allows students to feel like they belong in the academic community, or that they can succeed at their academic goals.

For example, a few participants noted that encouragement was an important factor in helping them transition to college. This encouragement appears to have subsequently increased their self-efficacy. Encouragement came from a variety of sources, including boyfriends, teachers, social workers and foster family members. One respondent stated her foster mother "believed [in me] and helped me believe in myself." Another had a teacher tell her she was gifted, and she should never give up. For others, knowing college was a possibility helped them strive towards their goals. As noted by one respondent, people who encouraged her educational development were most important in helping her transition to college. Another student noted how important it was that she was in a program that "made me believe higher education was possible." Though social support is

technically an external influence, the comments from respondents indicate it can also serve as a means of fostering internal strengths.

A Lack of Social Support for Some. In spite of the perceptions among many respondents that social support was a key factor of their success, a large percentage of respondents indicated very little social support at all. About one-third of respondents believed that it was not at all true that an adult expected them to attend college and they did not have adults in high school that talked with them about their problems. Similarly, one-third of respondents indicated it was not at all true that they had peers who talked with them about their problems or helped them when they were having a hard time.

When I isolated out these respondents, some interesting findings surfaced.

Compared to the overall responses, the 16 respondents who indicated a lack of social support from adults, peers or both were more likely to indicate that personal strengths were the most important factor getting them to college than the rest of the respondents (50 percent as opposed to 37 percent). Given the lack of social support that many foster youth face, this finding illustrates that even those students who lack support in some areas, may still draw upon other protective factors like noncognitive behaviors, skills, and attitudes to achieve the benchmark of enrolling in college. I will discuss noncognitive factors in more detail later in the chapter.

External Factors of Success – Participation in School and the Community

"Sports taught me how to work with people. They also taught me leadership skills."

The respondents to this survey indicated a strong commitment to helping others and a majority of respondents were involved in both school and community activities. As shown in Table 6, in high school about 66 percent of respondents participated in clubs, sports, church or other group activities and 57 percent of respondents participated in

Table 6. Participation in the community		
During high school	Number	Percentage
I was a part of clubs, sports teams, church/temple, or other group activities	n=33	
Very much true	13	39
Pretty much true	5	15
A little true	4	12
Not at all true	11	33
I was involved in music, art, literature, sports or a hobby.	n=33	
Very much true	12	36
Pretty much true	4	12
A little true	3	09
Not at all true	13	39
I helped other people	n=33	
Very much true	16	50
Pretty much true	10	31
A little true	5	16
Not at all true	2	06

music, literature or art at least some of the time. An overwhelming majority of respondents (93 percent) reported that it was at least a little true that they helped other people in high school. These findings are consistent with other studies about college-enrolled former foster youth, who found similar levels of involvement among their samples (Merdinger et al., 2005; Hass & Graydon, 2009).

In spite of the prevalence of participation in extracurricular activities in the group, few respondents mentioned these activities as important in their transition to college.

Only two participants noted in the open-ended questions that their participation in sports helped them get to college, with one respondent saying, "Sports taught me how to work with people. They also taught me leadership skills." Only one respondent rated extracurricular activities as the most important factor helping them transition to college.

In part, this may be attributed to the number of placements changes this population experiences. Moving from one home to another, or from one school to another can disrupt a person's participation in extracurricular activities. Though few of the respondents identified their participation in the community as important in their transition to college, those that did provide comments identified how extracurricular activities helped build social skills, which the CCSR framework identifies as an important noncognitive factor shaping academic success among students.

Instead of citing extracurricular activities as important in their educational journey, respondents instead noted participation in programs aimed at increasing college readiness and college retention. Six respondents participated in programs specifically geared towards foster youth, including high school programs such as Independent Living Programs (ILP) and California Youth Connection, as well as college programs like the Guardian and Renaissance Scholars programs. Other respondents were enrolled in programs for low-income youth or other underserved youth, including high school programs like Advancement Via Individual Determination and Upward Bound, and college programs like Extended Opportunity Program & Services at community colleges

and Educational Opportunity Programs at four-year institutions. Access to programs that help foster youth with college readiness and retention were clearly important in these students' educational journeys, with over one-third of respondents indicating their enrollment in these programs. As noted by one respondent, "[ILP] made me believe that higher education for me was possible."

Noncognitive Factors

In addition to external factors of success, there is clear evidence from the literature that internal skills, behaviors and attitudes can help foster youth overcome barriers and succeed. The CCSR framework identifies five factors that play a key role in helping students succeed in academic settings: academic behaviors, academic perseverance, academic mindsets, learning strategies and social skills. This survey measured one noncognitive factor specifically, academic perseverance, through use of a tool called the grit scale. In this section, I will report out my findings about the grit level of respondents. Then, I will turn to the general role noncognitive factors played in these respondents' transition from high school to college, using themes from the open-ended questions to illustrate my findings.

Grit: "Doubt is OK momentarily, but keep moving on until you are certain." As noted in the methodology section, studies typically use grit scores as a predictor of successful outcomes, for example, grittier individuals were more likely to become a spelling bee finalist or make it to their second year as a cadet at West Point. However, due to time and resource restrictions, this survey was only able to assess grit

descriptively. The grit scores from this survey are reported in Table 7, alongside average grit scores from other studies.

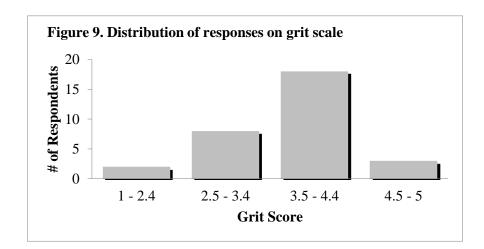
Table 7. Grit scores			
Sample Characteristics	Number	Median	Std. Dev.
Adults aged 25 and older	690	3.41	0.67
Ivy League undergraduates	138	3.46	0.61
National Spelling Bee finalists	175	3.50	0.67
This survey (college-enrolled former foster youth)	31	3.63	1.06
West Point cadets in Class of 2010	1308	3.75	0.54
West Point cadets in Class of 2008	1218	3.78	0.53
Resident Athletes at the Olympic Training Center	6	3.90	0.33
Black Male collegians	140	4.08	0.88

Data compiled from: Duckworth et al., 2007; Poczwardowski et al., 2013; Strayhorn, 2013

The grit scale ranges from a score of 1 (not at all gritty) to 5 (extremely gritty).

The mean grit score for the participants was 3.63 out of 5, with a range of 2.25 - 4.75.

Although the respondents did display more grit than some study populations, overall their score is fairly average in the context of other studies. Because the standard deviation of the scores was large, I plotted the grit scores in a bar chart to analyze the results in more detail (Figure 9). From the disribution of scores, it appears a few outliers are skewing the



mean lower than is typical of the sample's individuals scores. The majority of respondents' grit scores fall between 3.5 and 4.4, putting their level of grit in line with West Point cadets, Olympic athletes, and black male collegians from other studies.

Although these findings might indicate that the foster youth in my sample are quite gritty, the results should be interpreted with caution. As noted previously, grit scores are typically used to predict successful outcomes, not to assess the average level of grit of a population or individual grit scores. Using grit scores descriptively, as is done in this survey, provides no direct connection with the academic success of students. Future research may want to explore grit further in foster youth populations to determine whether higher levels of grit predict desirable academic outcomes, including improved test scores, higher GPAs or enrolling in college.

In addition to the analysis described above, I broke out the 10 respondents who scored high on the grit scale (4.0 or higher) and compared their responses to the overall findings of the survey. While these respondents did spend more time in foster care than other respondents on average (9 years as opposed to 7.5), they had the same amount of placements as respondents overall. They reported similar levels of social support in their lives and found similar factors were helpful in transitioning to college, including information about financial aid, advising about college, personal strengths and social support. Such findings indicate that even those students with the highest reported level of grit still likely rely on several other factors, including social support, to get them to college.

Though the overall grit findings do not provide much insight into the academic success of these students, the subsections of the grit scale, consistency of interest and perseverance, produce some interesting results.

Table 8. Grit scale subsections	
Consistency of Interest	Perseverance of Effort
New ideas and projects sometimes distract me from previous ones	Setbacks don't discourage me
I have been obsessed with a certain idea or project for a short time but later lost interest	I am a hard worker
I often set a goal but later choose to pursue a different one	I finish whatever I begin
I have difficulty maintaining my focus on projects that take more than a few months to complete	I am diligent (hard-working and careful)

Table 8 breaks out the grit scale statements by subsection. As conceptualized by Duckworth, grit consists of two elements: consistency of interest and perseverance of effort. Respondents must score well in both areas to be considered gritty in terms of this scale. Using the subsections of the grit scale allows further analysis about which area of grit respondents are excelling at, if any. While the participants scored fairly average on consistency of interest statements (3.16 out of 5), they showed a high amount of perseverance, scoring 4.1 out of 5 possible points on these statements. This score was similar to that of resident athletes (4.13) at the Olympic Training Center in Colorado Springs (Poczwardowski, 2013). Of all the grit statements, respondents scored best (4.45 out of 5) on the perseverance statement, "I am a hard worker," with 91 percent of participants identifying that statement as very much or mostly like them. While the

average score of respondents does not identify them as "extremely gritty," they are clearly self-identifying as perseverant and hard working on the subsections of grit.

This distinction is important in terms of academic success. Grit is often conceptualized as an innate personality trait that cannot be learned, and the grit scale measures it accordingly. In other words, the scale measures what is assumed to be a fixed trait that stays constant over time. In this sense, it is limited in its applicability in an educational environment. If grit is a fixed trait, then there is little that outside interventions can do to improve the grittiness of an individual. However, the CCSR framework notes that mindsets and learning strategies can help students act grittier in an academic setting. Students who are not innately gritty as measured by the grit scale may still learn to persevere by setting goals and working hard to achieve those goals, even in the face of setbacks. The framework calls this notion academic perseverance, and assessing this concept, as opposed to just innate grit, may be more beneficial in terms of relevance to the educational community.

As a result, I analyzed the comments students provided to try to identify if there were broader themes of academic perseverance beyond grit. According to the CCSR framework, academic perseverance requires "not only an initial surge of momentum in a focused direction but also the ability to maintain that momentum regardless of what gets in the way" (Farrington et al., 2012, p. 20). This tenacity requires that students set both short term and long-term goals, and continue to strive for those goals even when faced with obstacles. A review of participant comments shows strong evidence that these

students are academically perseverant in terms of their drive to achieve the goal of enrolling in college.

College-Bound: "I was determined to finish college and pursue my career." Eight out of the 26 respondents who provided comments mentioned perseverance as important, articulating a strong desire to go to college and an ability to overcome obstacles to attain that goal. For a few respondents, internal drive was key to achieving their goal. "I relied on no one buy myself! I pushed myself, by myself to get into college." This sentiment was reflected by another participant who states "I did not have anybody helping me transition into college. College was always something I had planned on doing."

For others, their ability to overcome obstacles helped them most. One respondent, commenting on the experiences that most helped them get to college, noted that, "I had a few slip ups and at one point was homeless, which I later overcame. Living independently teaches many lessons." Another respondent also experienced homelessness. Rather than let that experience deter him, he used his "desire to get off the streets" to help motivate him to enroll in college. A third respondent articulated the importance of "being resilient, hopeful...and not [getting] discouraged" in her transition from high school to college. For one participant, her first time enrolling in college was unsuccessful, and she ended up dropping out. In spite of this setback, she continued to strive towards her goal of getting a college degree. After a year passed, this student reenrolled in a community college, earned her Associates of Arts degree and then transferred to a four-year institution. For this former foster youth, "these experiences

were important because I showed myself initiative...and used my own resources to get the work done, without giving up and dropping out [the second] time."

Academic Mindsets: "Making a lot of costly mistakes and learning from them is the best way to learn." According to the CCSR framework, academic mindsets can serve to encourage or inhibit the continuing effort that is required to overcome obstacles and achieve goals. Academic mindsets include seeing a connection between the task at hand and future goals, which helps students be persistent in their effort to attain those goals (Farrington et al., 2012). Many of the comments, though not directly related to the academic mindsets outlined in the CCSR framework, do indicate a positive mindset among respondents. Participants related their ability to "stay on top of things", "always ask questions" and "aspire to be my personal best" as strengths that allowed them to transition into higher education. For one participant an "optimistic outlook...helped me to get through the hard times." Curiosity, tenacity and learning from mistakes were attributed to successfully enrolling in college. Though not directly measured as an "academic mindset" in the survey, these comments indicate that some students utilize positive behaviors and attitudes to help them succeed in an academic setting.

The Importance of Noncognitive Factors. While the overall grit score did not identify these students as exceptionally gritty, their survey responses still illustrate their ability to persevere academically and enroll in college. Additionally, the students displayed a positive academic mindset, which research identifies as an important contributing factor in academic success. Though the survey did not measure many of the

CCSR noncognitive factors specifically, the results indicate that such factors may play an important role in the pathway to higher education for foster youth.

Table 9. Important factors for college transition
Which of the following were important in helping you transition to college

(please mark all that apply).

Category	Number	Percentage
Information about financial aid	27	87.10
Advising about college	26	83.87
College preparation or AP courses	9	29.03
Extracurricular activities	11	35.48
Social support (mentors, family, friends)	22	70.97
Personal strengths	25	80.65
Other	2	6.45

As illustrated in Table 9, respondents overwhelmingly identified "personal strengths" as important in their transition to college (81 percent of respondents). I chose this term to describe noncognitive factors in the survey. When asked to cite what was *most* important, participants selected personal strengths over all of the other options, as seen in Table 10.

Table 10. Most important factor for college transition Which of the following was most important in helping you transition to college (please select only one).

Category	Number	Percentage
Information about financial aid	6	20
Advising about college	2	07
College preparation or AP courses	1	03
Extracurricular activities	1	03
Social support (mentors, family, friends)	8	27
Personal strengths	11	37
Other	1	03

This gives a clear indication that the students in this survey believe that internal behaviors, skills and attitudes helped them succeed in enrolling in college. The CCSR framework would suggest those personal strengths may include academic mindsets, academic perseverance, academic behaviors, learning strategies, and social skills. Although the survey results presented here are an important first step in identifying the role these factors play in the educational journey of former foster youth, further research is necessary to measure specific noncognitive factors and their correlation with academic success in this particular student population.

Of note, college preparation and AP courses are considered important by very few of the respondents to this survey. This finding is interesting when put into the context of a long history of research that suggests AP courses or other challenging curriculum are some of the best predictors of student success in high school and beyond (Adelman, 1999; Adelman, 2006). Many students enroll in these courses in order to become more prepared (and competitive) when enrolling in college. The low percentage of respondents attributing their success to rigorous academic coursework indicates these students may be excluded from the typical pathways that college-bound students experience. It is possible the former foster youth from this survey attended high schools that are less likely to offer AP classes or college preparation courses. Alternatively, the high mobility of the foster student population may prohibit their enrollment or success in more challenging coursework. If such speculation is true, then the lack of access to college preparation or AP courses may be a large contributing factor to why so many foster youth do not go on to college. Unfortunately, this survey did not ask detailed questions about the student's

academic history that would allow a conclusion about why these students do not consider college preparation and AP courses significant in their enrollment in college.

Nonetheless, it is an interesting finding that future research may want to explore further.

Beating the Odds

"I wanted to show [my homeboys] there is more than being the criminal minority."

Both external and internal influences appear to have impacted these students' journey from high school to college. Yet these influences do not affect students in isolation. Rather, individuals appear to draw upon several factors to overcome adversity and succeed. Many of the participants' comments reflect the dynamic relationship between both external and internal factors that they attribute to their enrollment in college. The respondents most clearly articulated the interplay between factors in a group of comments I call "beating the odds."

As described in Chapters 1 and 2, foster youth face significant obstacles to academic success, stemming from challenges in both the home and school environment. As a result, many foster youth fare poorly at school and end up dropping out. Rather than letting obstacles deter their progress, several of this survey's respondents articulated using negative external experiences to foster the internal strengths they attribute to their ability to beat the odds and succeed at enrolling in college. The most extreme example came from one respondent who was homeless for a period of time. This student cited "homelessness and the desire to get off the streets" as one of the most important experiences in his transition to higher education. More commonly, respondents drew motivation from negative experiences with the people in their lives. In reference to his

relationship with his biological mom, one respondent noted he "wanted to prove that rising above adversity is possible and never too late." Another respondent noted her "mother's life example of not going to college" helped developed "the goal to not be like her." Another participant's peers were involved in criminal activities. Instead of getting involved, he wanted to prove to his peers that there are options beyond the "criminal minority."

That same participant relied on his biological siblings as a motivational factor, citing his sisters as the most important people helping transition to college. In his words, he "wanted to be their role model. In hopes [sic] they seek higher education and a better quality of life." Another respondent found similar motivation, wanting to "show my brother he can reach the same potential I have achieved."

Conclusion

The findings of this survey show that the participating former foster youth perceived the external and internal factors identified in the academic research as helpful in achieving the important milestone of enrolling in college. When asked to account for what worked in their transition from high school to college specifically, respondents indicated that both social support and internal strengths were key factors. And although respondents' grit scores did not identify them as extraordinarily gritty, these former foster youth commonly described themselves as hard working and perseverant, and they attributed these characteristics to their successful enrollment in college. Additionally, respondent comments illustrated that external and internal factors are not mutually exclusive. Rather, interrelated influences coalesced to help them succeed academically.

The findings of my survey indicate that this sample of foster youth relied on myriad factors to help them transition from high school to college. The students recruited the support they needed from people in their lives, particularly adults in the school and community environment. The lack of social support they perceived from the home or family environment indicates the particularly important role that school may play in the lives of foster youth. The social support respondents received from those around them may also help cultivate the noncognitive strengths that many articulated as important in their transition to college. Though the survey did not directly measure these strengths, several themes from the respondent comments implicate the importance of hard work, perseverance and determination in their academic journey.

Though the survey helps establish which factors these student perceived as important in helping them enroll in college, as noted throughout this paper, the findings should be interpreted with caution. The survey does not establish a causal relationship between the assessed factors and academic success. Nor does it address whether the identified noncognitive strengths are learned, or innate to the individual. Additionally, respondents of this survey represent a small and unique subset of a much larger population of students. There is no guarantee that what works for these students will work for all foster youth who have the goal of going to college. In spite of these limitations, the findings of this survey do have important implications about the role that both social support and noncognitive factors may play in helping foster youth attain enrollment in higher education. I discuss these implications in Chapter 5.

Chapter 5

DISCUSSION

In 2013, California became the first state in the nation to identify foster youth as a distinct student group for the purposes of K-12 funding and accountability. Under the Local Control Funding Formula (LCFF), the state provides school districts supplemental funds for students with greater educational needs, defined as low-income students, English language learners, and foster youth (EdSource, n.d.). In return, districts must set specific goals to help improve the academic outcomes for those student groups over time. However, the educational supports that foster youth need are not yet well known, and many districts are struggling to create appropriate services, teaching strategies or interventions that will help improve the academic performance of this particularly vulnerable student group. Identifying both the academic barriers and determinants of success for this student population will be essential in meeting the state's new mandate.

This research was developed to help inform the conversation, by assessing possible factors that helped former foster students enroll in college. From the literature, I identified a few key factors that past studies have found are important in helping foster youth overcome adversity and reach successful outcomes. These factors include social support, participation in the community and noncognitive strengths. The survey grouped these factors into two categories: external supports and internal strengths. Given the new mandates of the LCFF, the survey focused specifically on key factors that may improve foster student academic outcomes, and that educators may be able to influence through programmatic interventions or teaching strategies. I hope to provide findings that are

meaningful for K-12 institutions, and can help them understand more about what helped these students enroll in college and which factors may be most helpful for students with similar goals.

This chapter will synthesize the findings of the survey and present key themes that emerged from my analysis. I will also present issues for further consideration.

However, given the exploratory nature of the survey, I will first summarize the limitations of the research in order to set an appropriate context for this discussion.

Limitations

The research on successful outcomes for foster youth is relatively new, and few best practices have emerged that directly link academic interventions to improved student outcomes. Although this survey was developed to inform the conversation on foster student success, it is limited in its applicability and generalizability to larger populations, and does not causally relate the assessed factors to academic success. As a result, the findings presented in this chapter are intended only to lay a foundation for further research and investigation among the academic and educational communities.

Methodological Limitations. As noted throughout this paper, readers should interpret the results of the survey with caution given its limitations. The survey did not capture or measure many factors that may help or hinder student success, including the amount or severity of trauma respondents' experienced in their childhood. Additionally, the sample size was small (just 33 respondents out of 100) and likely represents a unique set of students within the greater population of former foster youth, those that graduate from high school and enroll in college. As a result, sampling errors, response bias and

nonresponse bias are likely present. Finally, the survey does not directly link the assessed factors with academic outcomes. Rather, the data rely on students' self-reported perceptions about what helped them achieve the academic benchmark of enrolling in college. For these reasons, although I will present issues for further consideration among my findings, I will not make specific recommendations about policy changes or educational interventions.

Other Important Considerations. In addition to these limitations, there are other important factors to consider. The survey relies on perceptions of students about what helped them enroll in college. The emphasis the group placed on personal strengths above other factors, though interesting, may be a skewed perception based on their history in the foster care system. Many foster youth face severe trauma in their childhoods, and associated with that trauma is a lack of supportive adult relationships in their home lives. From this context, it is possible respondents to this survey are not giving enough credit to the external sources of support in their lives. Instead, they may over attribute their success to their own personal strengths.

Another important consideration is that not all students set the goal of going to college. Though enrollment in college was set as the benchmark of success in this study, for many students graduating from high school is equally important to matriculating into higher education. K-12 institutions currently focus on both college and career readiness, and that includes giving students the skillset to successfully transition out of high school and into employment, technical training programs, or the military. Therefore, although the factors assessed in this study may be important for attaining higher education, they

may be less important for those students who hope to go on to a career or the military post-graduation.

Nonetheless, this research provides interesting insights into the factors that college-enrolled former foster youth attribute to their successful enrollment in college. Given the shifting educational landscape in California, K-12 and higher education institutions are looking to better understand what factors may improve foster students' academic outcomes. The broad themes identified in this study are an important first step, laying the foundation for future research to explore which factors help this vulnerable population succeed.

Themes of Success

In order to better understand how this group of students accounts for their success, I administered the survey to former foster youth at two higher education institutions in Northern California. After reviewing the findings of the survey, there are key themes of success that emerged among the former foster youth that participated. These findings are generally supported by the findings from the literature review. This section will report out four main themes. First, respondents reported that they relied upon several sources of support in their path towards higher education, and these factors appear to create a "college-going" culture. Second, students responded that their (nonmonetary) sources of support came primarily from their educational environment. Third, participants perceived enrollment in specialized support programs as a key factor of their success. Lastly, among all of the assessed factors, these students believed noncognitive strengths were the most important in helping them transition from high school to college. These findings

have important implications for both K-12 educators as well as higher education institutions about what worked for these students along their academic journey.

Students Rely on a Variety of Supports That Promote College-Going Culture. One of the most important conclusions drawn from this study is that student did not just rely on external sources of support. Rather, respondents of this survey articulated several sources of support they relied on in order to beat the odds and succeed at enrolling in college, with their own personal strengths cited as playing a key role. On the survey question where respondents were asked to select which factors helped them transition to college, (see page 72) 89 percent of respondents selected three and 30 percent selected five of the six factors. Respondents perceived both external and internal factors as important, often citing a combination of factors as helpful. Key among these influences appears to be a combination of factors that created a college-going culture for these students.

The Center for Educational Outreach at UC Berkeley created a "College-Going Culture Rubric," adapted from Patricia McDonough's research, which outlines nine elements of a college-going culture (College Tools for Schools, n.d.). Among those elements are factors that this student population articulated as important in their journey from high school to college, including school staff speaking with them about college, expectations from adults about college enrollment, readily available information and resources on how to get to college, and counseling that identifies and articulates different pathways towards college. When respondents were providing comments on the survey about the people and experiences that most helped them transition to college, many cited

not only access to information, but also the experience of external support from adults that provided them encouragement to pursue their goals, confidence in their abilities, and a belief that higher education is attainable.

These responses support the findings of emerging research on college-going and college-enrolled former foster youth, in which social support acts as a lever through which noncognitive factors can be developed. Research has linked social support with increasing self-confidence, sense of purpose, and resilience among these populations, suggesting growth in one area can cultivate growth in the other (Kirk & Day, 2011; Jones, 2012; Daining & DePanfilis, 2007; Hass & Graydon, 2009). Hass and Graydon (2009) called these caring relationships, "turnaround people," who not only provided students emotional and social support, but who helped youth understand their own strengths and abilities. Such relationships may be key in creating a college-going culture in which foster youth are exposed to the concept of college, are provided the information they need to get there, and receive the social and emotional support that facilitates their personal growth and helps them succeed.

The School Environment is Influential. For foster youth, many of whom experience instability in their home(s), school may be the only place where they experience a college-going culture. This assertion is supported by the findings of the survey. The literature review outlined several challenges foster youth experience, and these students faced some similar challenges, including extensive stays in foster care and multiple placements changes. In spite of these challenges, respondents report accessing supports that they attribute to their ability to overcome barriers and succeed. A majority

of respondents found this support in their academic setting, suggesting they perceive educational institutions as influential in shaping their educational pathways.

Participants reported adults in their high schools provided both informational and personal support. Informational support includes the practical advice and information necessary to enroll in college and personal support includes the encouragement and belief that higher education is possible. Respondents appear to continue to draw upon this school-based support once they have matriculated into college, with many citing their college counselors, professors or other college mentors as important factors of their success. Educational institutions, therefore, may be able to provide a broad variety of supports to foster youth that are missing in many of these students' home lives. In terms of the CCSR framework (see page 10), educators may influence the noncognitive skills, behaviors and attitudes that research suggests improves student academic success.

Additionally, adults at school can help create the college-going culture that may be essential in supporting foster youth who have the academic goal of getting their college degree.

Thus, K-12 educators may want to consider how foster youth interact with adults in the school and classroom context, and whether those relationships are providing the necessary supports foster youth need to attain their academic goals. For this population of students, educators may want to consider looking beyond providing just academic content and knowledge, and consider appropriate ways they can provide the additional informational and personal support these students may need to succeed.

Support Programs Play an Important Role. Another cited source of support for respondents of the survey includes the out-of-school programs in which they participated—primarily programs aimed at increasing rates of college enrollment and retention among foster youth. Program enrollment in both high school and college appears to be important for this group of students.

California currently has several educational resources geared toward supporting foster youth educational development. Such programs include K-12 academic support like the Foster Youth Services programs, Independent Living Programs that teach life skills, as well as supports aimed at helping foster youth gain acceptance to, pay for, and complete college. In spite of the existence of these programs, many foster youth in the state continue to struggle in educational settings. In part, this may due to restricted access to programming and a lack of consistent educational monitoring for foster youth (LAO, 2009). Additionally, because the emphasis in the child welfare system is on the health and safety of the student, social workers may consider educational services as less important or relevant.

The survey did not ask students to report on what programs they were enrolled in, in either K-12 or higher education. Rather, respondents noted their participation in these programs in the comments section of the survey. As a result, I cannot distinguish differences between respondents enrolled in these programs, and those that are not. Additionally, with no comparison group, I cannot directly attribute the success of these students to their enrollment in supportive programs. However, the findings do highlight some areas for further consideration. If the findings of this survey were replicated on a

larger scale, and support services were found to make an identifiable difference in the ability of students to enroll in college, it may make sense for K-12 districts and higher education institutions to consider which students have access to these programs and whether expanded participation opportunities would benefit the population of foster youth they serve. Many of these programs currently offer tutoring, extracurricular activities and some educational monitoring (LAO, 2009). Future research may want to assess which of these services are most valuable for improving foster student outcomes. Additional studies may want to consider specifically the role that comprehensive academic counseling in these programs plays in informing foster youth of their higher education options, and pathways towards achieving those goals. K-12 institutions may also want to review how they work with social workers to ensure that educational progress is monitored alongside the health and safety of the child.

Noncognitive Factors Were Perceived as Key in Supporting Foster Student Success. Respondents of this survey believed their personal strengths were the most important factor helping them matriculate into higher education. As discussed previously, respondents perceived external supports as most helpful when they cultivated the internal skills, behaviors and attitudes these students used to enroll in college. However, there is much debate about the extent to which external influences can change noncognitive factors in an individual. While this population perceived noncognitive factors as playing a key role in their academic success, further research may want to explore to what extent these skills, traits and behaviors can be influenced in the academic setting. Most

commonly referenced by these respondents was the importance of positive academic mindsets and academic perseverance.

Research has correlated the trauma that foster youth experience with impairments to children's concentration, memory and language, as well as increased experiences of stress and anxiety, all of which compromises educational achievements (Romano et al., 2014). Without the proper coping skills and learning strategies to overcome the adversity they experience, many foster youth may fail to reach their academic potential, as evidenced by the research on their test scores, graduation rates and college enrollment rates (Barrat & Berliner, 2013; Stuart Foundation, 2012; Frerer, Sosenko & Henke, 2013). As a result, focusing on noncognitive approaches in the educational setting may help these students grow socially and emotionally in a way that subsequently improves their cognitive ability.

The CCSR framework is an important tool in understanding the influence of noncognitive factors on academic achievement. Farrington and her colleagues' (2012) reviewed the literature on these factors and identified:

The best leverage points for improving student performance are in helping teachers understand the relationship between classroom context and student behaviors, providing teachers with clear strategies for creating classrooms that promote positive academic mindsets in students, and building teacher capacity to help students develop strategies that will enhance their learning and understanding of course material. (p. 6)

Strategies that incorporate a focus on cultivating noncognitive factors in the academic environment may not only help improve the academic outcomes of foster youth, but also other at-risk students groups, an important goal in California given the newly implemented Local Control Funding Formula and its mandates. As a result, educational institutions may want to assess the emerging practices around the country regarding incorporating noncognitive strategies into the classroom.

For example, research studies have begun applying growth mindset techniques in schools to emphasize effort instead of achievement. These techniques are meant to improve noncognitive skill, and students trained with these techniques display greater sustained academic effort than other students do, and they outperform their peers in math (The Science: The Growth Mindset, n.d.). There are thousands of educational institutions throughout the United States that are employing social and emotional learning programs, which focus on noncognitive factors that increase the "emotional literacy" of students to subsequently improve cognitive ability (Kahn, 2013). Over 70 high schools in the regions around Chicago, New York and Houston are implementing OneGoal, a program that emphasizes noncognitive factors as a means of empowering under-performing low-income students to enroll in and persist at college (OneGoal One-Pager, n.d.). Looking towards these emerging programs and practices may help California identify what interventions or learning strategies may be most effective for foster youth and other atrisk youth in the state.

Questions for Future Research

Continued research is necessary in order to more fully understand how educators can best support the academic goals of foster youth in California. Although I address many issues for further consideration throughout the chapter, I cannot make specific policy recommendations without more investigation into the role the assessed factors play in the academic journey of foster youth. I first recommend that research try to establish causality between the factors assessed in this study and academic success. Specifically, researchers may want to measure social support or noncognitive strengths directly and then use those measurements as predictors of successful outcomes in foster youth, including enrollment in college.

Unfortunately, the research on noncognitive factors has not established accepted means of measuring skills, traits or behaviors in students. Therefore, future research may also want to focus on further developing measurement methods to assess noncognitive strengths. As noted by the authors of the CCSR framework, conceptual clarity around these factors and better measures will provide an important first step in being able to causally relate noncognitive factors with student success (Farrington et al., 2013).

The literature has also questioned the malleability of noncognitive factors, and little is known about the extent to which educational interventions can cultivate noncognitive strengths. Future research may want to consider longitudinal studies that look at specific teaching interventions or classroom strategies and their actual impact on noncognitive factors. Research in this area should also consider not just whether noncognitive factors can be improved, but if improving these skills, behaviors and traits

actually leads to improved cognitive ability in students. In other words, does cultivating noncognitive strengths lead to better academic outcomes.

Lastly, I recommend future research carry out comparative studies between foster youth who have attained benchmarks of success, and those who have not. Assessing not only what helped a group of students succeed, but how they directly differ from their peers who did not, will be beneficial in better understanding what factors of success are most important in helping improve the academic outcomes of foster youth.

Conclusion

The state typically removes children from their home and places them in foster care due to substantiated claims of abuse or neglect. Such maltreatment often results in physical and emotional trauma that can hinder successful outcomes for this student population, including academic success. Their education can be further compromised by multiple placement changes within the foster care system and subsequent disruptions to their academic experience. These barriers contribute to a significant achievement gap for foster youth that sets them apart from other students in California, and additional supports may be necessary to help this population reach their full academic potential. Without intervention, foster youth will likely continue to face the poor academic outcomes that have limited their economic potential and social mobility.

This thesis was aimed at informing the conversation about foster youth success post-high school graduation. Although it was an exploratory study and does not definitively provide information about which factors will best support the academic goals of foster youth, the findings do highlight areas that future research may want to consider.

In particular, future research may want to assess the inclusion of noncognitive teaching strategies in the classroom and whether focusing on these factors improves the academic outcomes for foster youth. Continued research will help the field better understand the needs of this particularly vulnerable group of students and help policymakers and educators formulate best practices that supports their academic journey.

APPENDIX A - SURVEY

Demographic Information

1.	What is your gender?
	a. Male
	b. Female
	c. Other
2.	What is your ethnicity (please mark all that apply)
	a. African American
	b. American Indian/Alaskan
	c. Asian or Pacific Islander
	d. Hispanic or Latino/a
	e. White/Caucasian
	f. Other (please specify)
3.	What is your classification at your current college?
	a. Freshman
	b. Sophomore
	c. Junior
	d. Senior
	e. Super Senior (5 or more years)
	f. Graduate student
4.	Did you transfer from a community college?
	a. Yes
	b. No
5	What is your current cumulative G.P.A? Giving an approximate answer is fine.
٥.	2.0 or less
	2.1 – 2.5
	2.6 - 3.0
	3.1 - 3.5
	3.6 - 4.0

Grit

6. Here are a number of statements that may or may not apply to you. When responding, think of how you compare to most people – not just the people you know well, but most people in the world.

	Very much	Mostly	Somewhat	Not much	Not like
	like me	like me	like me	like me	me at all
New ideas and					
projects sometimes					
distract me from					
previous ones.					
Setbacks don't					
discourage me.					
I have been					
obsessed with a					
certain idea or					
project for a short					
time but later lost					
interest.					
I am a hard worker.					
I often set a goal					
but later choose to					
pursue a different					
one.					
I have difficulty					
maintaining my					
focus on projects					
that take more than					
a few months to					
complete.					
I finish whatever I					
begin.					
I am diligent (hard-					
working and					
careful).					

Social Support

7. During high school I had friends my age...

	Very	Pretty	A little	Not at all
	much true	much true	true	true
Who really cared about				
me.				
Who talked with me				
about my problems.				
Who helped me when I				
was having a hard time.				

8. During high school, there was a parent, guardian or some other adult...

	Very	Pretty	A little	Not at all
	much true	much true	true	true
Who expected me to				
attend college.				
Who talked to me about				
my problems.				
Who always wanted me				
to do my best.				

Participation in school or community

9. During high school...

	Very	Pretty	A little	Not at all
	much true	much true	true	true
I was a part of clubs,				
sports teams,				
church/temple, or other				
group activities.				
I was involved in music,				
art, literature, sports or a				
hobby.				
I helped other people.				

Background

At what time in your life were you in the foster care system? Please mark all that apply: a. Infancy/Toddler b. Elementary School c. Middle School d. High School
What was the total length of time you spent in the foster care system (in years)? Giving an approximate answer is fine years
How many foster care placements did you have in total? Giving an approximate answer is fine.
At what age did you leave the foster care system:
Did you ever repeat a grade in school? a. Yes b. No
If you answered "yes", please specify which grade(s) you repeated:
Which of the following were important in helping you transition to college? (please mark all that apply) a. Information about financial aid b. Advising about college c. College preparation or AP courses d. Extracurricular activities e. Social support (mentors, family, friends) f. Personal strengths (for example self-motivation, adaptability, resilience) g. Other (please specify):

OI III	inswers from above, which was the most important?	
	a. Information about financial aid	
	b. Advising about college	
	c. College preparation or AP courses	
	d. Extracurricular activities	
	e. Social support (mentors, family, friends)	
	f. Personal strengths (for example self-motivation, adaptability resilience)	,
	g. Other (please specify):	
impo	think about your educational experience, who are some of the most ant people that helped you transition into college? Why do you consider the poople important?	der
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