Educational Second Chance: A Study

of successful male college students who had formerly not completed high school.

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by

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Abstract

This IPA (Interpretative Phenomenological Analysis) study was used to gain a better understanding of how men who are HSNCs (high school non-completers) view their success in college. Males were the focus because they have more educational difficulties. They have lower grades, graduation and college acceptance rates, higher rates of suspensions, high school non-completion, violent crime, truancy, vandalism, early sexual activity, incarceration, as well as greater use of alcohol, tobacco, drugs, and welfare (Heckman, Humphries & Kautz, 2014). The average HSNC costs society about a half a million dollars in lost taxes and extra public services (Belfield & Levin, 2007). If an HSNC earns a college degree, they can expect life outcomes similar to any other college graduate. If not, their life outcomes are virtually indistinguishable from any other HSNC. Unfortunately, only about 1% of HSNCs earn a college degree (Heckman, Humphries & Kautz, 2014). Counting HSEC holders as high school graduates masks the true HSNC rate of students of color which has not improved in 50 years (Heckman & Kautz, 2014, p. 9; Heckman, Humphries & Kautz, 2014, p. xi-xii.)

Mindset theory (Dweck, 2006), which is correlated with academic success, partially guided the interview questions and the data analysis. Six male HSNCs under 40 years of age. Most of the men reported developing more of a growth mindset than they had in high school. It was also found that motivating career goals that required higher education played an important role in their academic success. The career goals were described as being meaningful, achievable, income-producing, interesting, and socially respected. A number of internal cognitive-emotional skill supports were delineated such as a growth mindset, agency, maturity, and planfulness exhibited in grit, self-control and delayed gratification. External structural supports for academic success were academic flexibility, employment, social norms, mental health, and financial.
Social supports included role models, parents, peers, and extra-curricular activities. The study concludes with recommendations for educational practice including more academic flexibility, cognitive-emotional skill development, and refining student career goals as early as elementary school. Finally, there are recommendations for further research on the relationship between Growth mindset, Grit, and motivating career goals.

*Keywords*: mindset theory, dropouts, high school equivalency tests, career goals
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Dedication

This is dissertation is dedicated to my grandchildren Preston, Paxton and Renata, and all other children, who are our future. May they benefit from its findings and know that learning is lifelong.
Chapter One: Introduction to the Study

The purpose of this Interpretive Phenomenological Analysis (IPA) study was to investigate individual experiences of young men who were successful in college even though they were all high school non-completers (HSNCs). This study explores their perceptions of their success. The knowledge generated is expected to inform college teachers and administrators in their educational practice and planning. This qualitative study employed semi-structured interviews and IPA to explore the phenomenon under study.

This chapter begins with a brief overview of the research related to high school non-completion (HSNCn) to provide context and background to the study. The rationale and significance of the study is discussed next, drawing connections to potential beneficiaries of the work. The problem statement, purpose statement, and research question are presented to focus and ground the study. Finally, the theoretical framework that serves as a lens for the study is introduced and explained in more depth.

Context and Background

Over 40 million (mostly males) in America have not finished High School, with another 1-1.5 million added each year (Greene & Winters, 2006; Howden & Meyer, 2010; US census as cited in Fuller, 2014, p. 3). They have lower income, employment and health indicators and higher divorce and crime rates (Heckman, Humphries & Kautz, 2014). Belfield and Levin (2007) estimated that an HSNC would cost society $392,000 ($488,000 in 2019 dollars) over a lifetime in lost tax revenue and increased social services. If they pass an equivalency test (ET) such as the GED test and earn a high school equivalency certificate (EC) and also graduate from college their life outcomes are equal to any college graduate who graduated from high school (Heckman,
Humphries & Kautz, 2014). However, if they also leave college without a degree or a vocational certificate, male HSNCs who earn an EC have measures of life outcomes such as income and health that are no different from other male HSNCs (Heckman, Humphries & Kautz, 2014). In addition, some now carry school loan debt.

**Rational and Significance**

There is a crisis among young males today. HSNC Males have higher rates of suspensions, violent crime, truancy, vandalism, early sexual activity, incarceration as well as greater use of alcohol, tobacco, drugs and government services (Heckman, Humphries & Kautz, 2014, p. 4). The majority of crime is committed by male HSNCs. Most inmates are male and have below average levels of education and are disproportionately men of color (McIntosh, Girvan, Horner & Smolkowski, 2014). This study may add insight and suggest solutions to this dire problem.

**Research Problem and Research Question**

Very few HSNCs ever complete a college degree or vocational certificate. Those rare success stories may reveal what supported their success and that knowledge may help others in the future. The purpose of this study is to understand how males, who did not graduate from high school, but entered college using a high school equivalency certificate (HSEC) or some other entrance test, perceive their success in college.

**The Research Question.** The research question guiding this study is:

How do male community college students who failed to graduate from high school make sense of their collegiate academic success?
Definition of Key Terminology

**Term 1**- HSNC(s)(n) high school non-completer (s) or completion

**Term 2**- HSEC or EC high school equivalency certificate

**Term 3**- HSET or ET high school equivalency test such as the GED or HiSET

The following section of this chapter will include a description and discussion of Mindset theory which will serve as the theoretical lens for this study.

**Theoretical Framework**

Mindset theory is a fresh perspective that may reveal new variables and provide fertile ground for new interventions and policies as well as further research. Carol Dweck (2000, 2006, 2015) believes, based on brain research, that people can grow smarter by forming more neural connections. In her book *Mindset*, Dweck (2006) categorizes people as having a growth mindset (40%), a fixed mindset (40%) or some combination of the two (20%). However, people can change their mindset depending on the situation and training. Interventions that use Growth Mindset training have shown positive results in achievement (Blackwell, Trzesniewski, Dweck, 2007; Dweck, 2008, 2015). Does this theory help explain the success of males in college who previously did not complete high school? Interview questions based on growth mindset inventories may reveal student beliefs and changes in belief that impact academic success.

Beliefs are learned and can be unlearned. Beliefs can be changed and challenged.

**Overview of Mindset Theory**

People have theories about themselves and the world related to whether their intelligence is fixed and unchangeable or malleable and can increase. Mindset theory calls these two
perspectives “fixed” and “growth mindset” (Dweck, 2006, 2017). The long held belief that our brain stops growing in our teens is not supported by brain research. Intelligence can change, both increase and decrease (Ramsden, Richardson, Josse, Thomas, Ellis, Shakeshaft & Price, 2011).

There is evidence that we may grow more brain cells or at least more connections. Burgaleta, Johnson, Waber, Colom and Karama (2014) found that as people’s intelligence increased, the outer layer of their brains became thicker. More connections between brain cells form as the result of exerting effort to learn and think. The brain can change physically and develop more capacity: become smarter. Taxi drivers in London have enlarged hippocampus due to memorizing the roads of the city but when they retired that structure returned to a normal size (Maguire, Woollett & Spiers, 2006). People may have more or less intelligence at birth but how the brain is used can increase or decrease that intelligence. Growing out of this research on how the brain works and develops Dweck (2006) developed the theory of Mindsets.

Mindset is a “self-theory” (Dweck, 2000) a belief about your ability. A growth mindset is correlated with healthier, happier and more successful people. These people also stereotyped others and acted on stereotypes less than fixed or entity mindset people (Dweck, 2000). Not only can you change yourself but that change can also change the world.

Dweck (2017) believes people can be categorized as having a growth mindset, a fixed mindset or some combination of the two. Mindset theory holds that intelligence and intellectual skills needed for success in school can increase with effort and practice. The fixed mindset believes talent and IQ are unchanging and you either have them or you don’t. The growth mindset sees challenges and even failures as opportunities for learning and growth. The fixed mindset sees failures as judgments of their ability or lack thereof. They will avoid difficult challenges out of fear of failure and being proven inept (Dweck, 2006, p. 42).
A student may have a growth mindset in one area but a fixed mindset in others (often math). Dweck has developed diagnostic survey tools that help identify a student’s predominant mindset. She found that about 20% of students had a mixed mindset and the rest were equally divided between growth and fixed mindsets. Dweck qualifies these statistics saying that no one is 100% growth or fixed mindset and one can flip back and forth between the two depending on the situation (Dweck, 2006, 2008, 2107).

**Mindset theory basics.** Dweck (2009) identifies three basic “rules” for the theory.

Rule one: The first is that a fixed mindset will focus on maintaining an image of being talented and the growth mindset student seeks to constantly learn and develop. Research Dweck (2009) found that students with a fixed mindset would choose assignments that made them look talented. Since they believe their intelligence is set, they like to display it but do not want to reveal their limits or deficiencies. They are concerned about grades and winning. Those with a growth mindset would seek out difficult challenges to help them become stronger or smarter. They focus more on learning than grades and doing their best and improving whether they win or lose. In the end the growth mindset students average higher grades as a by-product of their growth mindset mentality (Blackwell, Trzesniewski, & Dweck, 2006).

Students with a more growth mindset see academic challenges as a way to get stronger and smarter (Dweck, 2017). They see school as a gym for their minds. They study longer, “deeper” and have better time management. Fixed mindset university students would avoid remedial help even though it meant they would do more poorly later. They did not want to look bad. Fixed mindset students and athletes are quick to blame the circumstances or the referee for their failure (Dweck, 2009).
Rule two: The second rule is that the fixed mindset student sees hard work as evidence that they are not talented; they should not have to work that hard if they really were smart. The growth mindset student is focused on effort, perseverance and the process. The fixed mindset student thinks, “If you are intelligent, you should be able to do things easily”. It is the less talented that have to work hard. Fixed mindset students avoid things that are difficult. They put less effort into tasks because either they do not think they have what it takes to do it so why waste energy or because if they do have the ability it should come easily. The more intelligent fixed mindset students slide through school with good grades and little real effort so when they hit higher-level university courses they are more likely to quit (Dweck, 2010a). They did not develop a work ethic and grit or experience the success of tackling a difficult challenge and overcoming it. Grit is passion and perseverance for a meaningful long-term goal. Grit helps students continue to try when they fail or meet a challenge. Duckworth (2013, May 9) said that the best idea she heard of how to develop grit was Carol Dweck’s growth mindset.

In a paper titled “Even Geniuses have to work hard”, Dweck (2010b) writes that growth mindset students look for difficult classes and projects. They enjoy the challenge and see it as an opportunity to “get smarter”. They do not take failure as a judgment of their personal worth but rather as revealing areas they can work on to improve.

Rule three: The third rule concerns reactions to failures and mistakes. The fixed mindset students try to avoid them. The growth mindset student sees them as a learning opportunities and a chance to improve and grow smarter. A fixed mindset can hold back both talented and less talented students though it tends to be correlated with lower achievement students. The fixed mindset students see mistakes and failures as exposing a lack of talent and intelligence. They try to hide or cover up failures so no one knows and then avoid the situation in the future. They
avoid subjects or tasks that are difficult because they think challenges should be easy if you are intelligent and talented. Image is everything rather than substance. It is more important that others think you are intelligent than to be or become intelligent (Dweck, 2009). They are more likely to cheat and falsify their grades and scores (Dweck, 2006). In contrast the growth mindset student sees failure as an opportunity to learn and grow. The growth mindset students seek to get better, smarter and more skilled. Effort is to be embraced, not avoided. It is not a zero sum game. Everyone can get smarter. Your goal is not to be smarter than others, just smarter than you were (Dweck, 2009).

**Changing mindsets from fixed to growth**

Dweck believes that people can develop a growth mindset or change a fixed into a growth mindset. Cohen and Brawer (2014) report that simply explaining that the brain can grow and get smarter when used to tackle difficult work can transform a student’s view of learning. As a result they are more motivated and get better math grades.

Dweck (2010a) believes that we can change our internal monologue from a fixed to growth mindset. She gives four steps:

1. Recognize what you are saying to yourself now. Do you doubt your ability to succeed at a challenge? Do you criticize and judge yourself as a failure or inadequate?

2. You can choose growth self-talk over fixed. It is a choice to view setbacks and criticism as a judgment of failure or a chance to get stronger and smarter.

3. Challenge the fixed self-talk.

4. Practice choosing the growth over the fixed mindset self-talk. It will become easier with repeated practice to see challenges as opportunities instead of threats.
Dweck gives a list of examples of challenging fixed mindset self-talk:

<table>
<thead>
<tr>
<th>Facing a challenge</th>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td>You do not have the talent or brains for this task</td>
<td>Maybe not yet but I can learn and get more skilled with time</td>
<td></td>
</tr>
<tr>
<td>You could fail and look bad</td>
<td>Failure is a way to learn and grow</td>
<td></td>
</tr>
<tr>
<td>Do not even try it – then no one will know if you are dumb</td>
<td>Not trying is missing a chance to grow and get smarter and wiser</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experiencing a setback</th>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you were smart you could have done this</td>
<td>Even geniuses have to work hard and put their heart into projects</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When you are criticized</th>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blame the circumstances or someone else like the referee, then I do not have to feel bad</td>
<td>I need to admit my weaknesses so I can work on them and get stronger. It may hurt but “no pain no gain”</td>
<td></td>
</tr>
</tbody>
</table>

Two of Dweck’s growth mindset sayings are, “That feeling of math being hard is the feeling of your brain growing” and when a student says “I’m not a math person” she likes to add “yet”.

Good, Aronson and Inzlicht (2003) compared growth mindset training, a sense-of-purpose training and a combined online training for 1594 high school students (82% were 9th graders, the rest were older) in 13 schools. The results showed improvement for all three groups compared to the control group. Sense-of-purpose worked best for improving grades followed by growth mindset and surprisingly the combined training was third best. In all cases the interventions for growth mindset improved achievement compared to a control group. The training was most effective with at risk students. This is exciting results and could help reduce inequities and close achievement gaps for minority students since proportionally more of them are at risk for not completing high school. It is also good news for males as they are more often at risk of leaving school (Heckman, Humphries, LaFontaine & Rodriguez, 2008).
Yeager et al. (2016) have developed an online intervention that improves student grades and reduced the number of D and F grades. The intervention is scalable to large numbers at little cost. The intervention focused on changing students’ “subjective construals” to see academic challenges as opportunities to develop. Essentially developing a growth mindset by reframing or interpreting their experiences from tests that expose a lack of ability to opportunities to improve intelligence and abilities.

Research has shown that a growth mindset can be developed in at-risk students with low cost interventions that involve an online lesson (Reid, 2014). Small-scale interventions have been helpful (Farrington et al., 2012).

**Praise and mindset**

Different ways of praising students can push them toward a growth or fixed mindset. Surprisingly, praising students for their intelligence or talent can lead to a fixed mindset and negative outcomes (Dweck, 2017, 2006, p. 71). Mueller and Dweck (1998) did an experiment on a multi-ethnic group of 128 fifth graders. Some were praised for intelligence and others for effort and process. They found that praise for intelligence undermined academic performance. IQ tests could actually produce a fixed mindset whether the student does well or not (Dweck, 2006, pp. 6 & 73). Toddlers who received more process praise developed more of a growth mindset that was measurable five years later (Dweck, 2017).

**Social implications of mindset theory for equity**

Growth mindset is able to reduce the effects of racism and sexism. Teaching growth mindset has potential to close achievement gaps for minority students and increase graduation rates. Fixed mindsets are more common among the poor (Dweck, 2008) and students of color are more likely to be poor than their white counterparts. Dweck (2008) found that growth mindset
improved math and science achievement for all but especially for females and minorities. Mindset helped reduce negative stereotypes for women and minorities. Thus Growth mindset can help reduce poverty.

**Criticism and Defense of Mindset Theory**

There are two major criticisms of Mindset theory. First, that focusing on growth mindset development will take time and money away from systemic and political reform; that it is not as important for education as socio-political reform. Second, that it blames the victim. The HSNC failed in school because of a fixed mindset, thus taking any responsibility for that failure off the teachers and the system.

According to Kohn (2015) Mindset Theory is detracting from needed systemic changes by attributing student failure to the student’s deficit thinking. He asks “Why we’re trying to fix our kids when we should be fixing the system?”. The word “fix” has a negative connotation, implying that people are broken, damaged and need fixing.

Yosso (2005) challenges the practice of labeling the cultures of poor minorities as deficient (Payne, 2005). Every culture has its strengths that can be harnessed. Yasso accuses Payne of deficit thinking when she defines or describes a culture of poverty to “other” the poor and in essence blame them for their poverty. Is Mindset theory one more white, western psychological theory that calls some cultures and ways of thinking “deficient” (Payne, 2005)? Is it a form of racism or classism that blames the victim? Ullucci and Howard (2015) warn new teachers that they may pathologize students in poverty and turn them into “others”. If we pathologize the poor as being stuck with a fixed mindset it may lead to self-fulfilling behaviors both on the part of the student and the teacher. Fixed mindset teachers will give up on students who do not catch on as fast. They assume they do not have what it takes for math. Growth
mindset teachers believe math skill can be developed, it is not a “have math skill” or “not have math skill” dichotomy, rather, “skilled enough” and “not yet skilled enough but getting there”.

A recent replicating experiment by researchers in Scotland on 624 students in China of Dweck’s 1998 experiment with multi ethnic students (Mueller & Dweck, 1998, p. 33) did not shown a connection between growth mindset and intelligence, resilience or academic performance (Li & Bates, 2017). This may be a cross cultural issue or poverty related but it points to the need for more research. It is possible that a fixed mindset regarding intelligence is so deeply ingrained in some cultures that it will take more extensive interventions. Lynch (2017, September 6) suggests that we may be settling for less than rigorous science because the Mindset theory is so appealing and hopeful. He looked at a number of studies and found a negative correlation between Sample size and effect size. Larger study groups saw less of an effect. He does not deny that there may be some effect for some students but when averaged, very little for overall.

Answering the critics. Vissor (Aug 21, 2015) countered Kohn by pointing out that it need not be an either/or proposition. He says Dweck is not opposed to systemic change, nor does she think it is the complete solution. She is aware of societal problems such as racism. Steele and Aronson (2005) wrote a chapter about Stereotype Threat (Aronson, 2004) in the “Handbook of Competence and Motivation” edited by Dweck. As editor, Dweck was aware of racism and societal barriers to student success elucidated in this article (Dweck & Elliot (eds.) 2005; Elliot & Dweck (eds.) 2013).

Advocating growth mindset education is not “fixing” broken children, but empowering and unleashing their intellectual power, which has been held back by fixed mindset self-talk, including negative racist and sexist stereotypes. If it is fixing anything, it is the negative “you
cannot change and will never amount to anything” message that society has perpetuated, especially for minorities. Mindset theory can protect children from being subjected to negative, fixed mindset messages from teachers, parents and society. Mindset theory does not remove responsibility from the teacher and blame the student or parent for failure. On the contrary, teachers who understand Mindset theory know that mindsets can be changed from fixed to growth and that the responsibility for doing that rests partly on them.

In a recent interview Dweck (2015) said that some oversimplify the growth mindset concept as just praising effort. She clarified that “a growth mindset is not just about effort”. Students need teachers and parents to help them learn good strategies and develop meaningful goals that will guide that effort.

There is a need to address “noncognitive” factors in student achievement and help them develop “academic mindsets” while understanding these issues are nested in a larger socio-political context (Farrington, 2013).

“The best ways to improve students’ perseverance and strengthen their academic behaviors is through academic mindsets and learning strategies. … Academic mindsets strongly influence the degree to which students engage in academic behaviors, persevere at difficult tasks, and employ available learning strategies. In turn, the use of appropriate learning strategies strongly influences the quality and effectiveness of academic behaviors and helps students stick with a task and persevere despite obstacles.” (p. 73)

Farrington (2013) promotes the development of growth mindset as one of 4 important elements of an academic mindset. The other beliefs are that the student belongs in an academic community, has the ability to succeed and values the coursework.
Cohen and Garcia (2014) give a defense for using evidence based psychological interventions in education. The use of “randomized double-blind” experiments that have shown the interventions to have positive, lasting effects on student achievement. They write, “social-psychological interventions reviewed here are small both in size and the resources dedicated to them. Yet they can yield large and lasting benefits” (p. 18).

Psychological interventions are low cost if the information distribution is scaled rather than given in one-on-one counseling sessions. Stereotype threat (Steel & Aronson, 1995), micro-aggressions (Solorzano, 1998), intrinsic motivation (Ryan & Deci, 2000) and Mindset (Dweck, 2006) are all concepts that relate to the self-perception of the individual student. However, educators must remember that individual students belong to a larger social and cultural context that affects their individual psychological state and not discount the effects of poverty and systemic racism, sexism and classism.

Lin-Siegler, Dweck and Cohen (2016) make the following clarification in response to critics of psychological interventions in a special edition of the Journal of Educational Psychology.

The focus on the psychology of the student is not meant to undercut the importance of other factors, such as the quality of subject matter instruction or school resources that can affect students’ learning greatly. The current approach is meant to supplement rather than replace efforts to improve teachers’ subject matter competence or to increase school resources. Nor is the current approach an attempt to “fix” or “reprogram” students from “nonmajority” backgrounds. Rather, the research showcased in this special issue represents an attempt to lift psychological barriers to student motivation and learning, such as unhelpful
beliefs about their capabilities, about what it takes to be successful in schools and beyond, about whether they belong in their classrooms, and about effective strategies for self-regulation. (p.295)

Mindset theory need not conflict with the efforts of social justice theories but can contribute to them and make them more effective. Dweck (2015) says,” The growth mindset was intended to help close achievement gaps, not hide them”.

If teaching growth mindset can be done inexpensively online for large numbers (Paunesku, Walton, Romero, Smith, Yeager & Dweck, 2015). It was done in Peru for about twenty cents a student (Peru: If You Think You Can Get Smarter, You Will. 2017). Growth mindset training should not take a significant amount of money or time from other interventions. The money used for these interventions appears to produce a large effect per dollar when compared with other interventions, such as new buildings. When we build new buildings students will be able to better utilize them.

Finally, the effects of growth mindset interventions may need refining and further study. Cultural, religious, philosophical, and socioeconomic factors may alter the effects of Mindset interventions.

**Mindset Theory Relates to Successful Male HSNCs in College**

Mindset theory may help us gain insight into why so many males do not complete high school. It may also help us understand why most of these same males also leave college before earning a diploma, even after passing a HSET (Heckman, Humphries & Kautz, 2014). Focusing on successful students may reveal insights into the variables and life factors that support that success. A key one may be mindset.
**Mindset Theory Applications to this Study**

Mindset theory will guide the formation of the initial interview questions. It can also be utilized in the analysis of the data and formulation of conclusions. Students do not complete high school for a number of reasons. Among them may be the fixed mindset belief that they cannot do the work due to lack of ability. Did they have a parent, peer or teacher who caused them to have a fixed mindset? Did successful male college students who previously did not complete high school go through a mindset transformation? If so, what led to that change? By looking through the lens of Mindset theory I hope to better understand this phenomenon and reveal new variables to study. This may help in identifying and designing better academic support for these young men.

**Conclusion**

Growth mindset helps college students succeed (Aronson, Fried & Good, 2002; Dweck, 2006, p.51; Robins & Pals, 2002). In addition, if growth mindset can increase grit (Duckworth, Ted Talk, 2013, May 9) and grit is correlated with school success (Duckworth, 2016, p.232), then growth minded students are more likely to complete college. Was it a change in mindset from fixed to growth that helped motivate students to take a HSET and enroll in and succeed in college? A change in mindset from fixed to growth may be part of the story.

Chapter two will explore the literature relating to HSNC’s, HSET’s and certification. What do we know about the millions of HSNCs who enter a community or four-year college, and why only about 1% succeed (Heckman, Humphries & Kautz, 2014)? How can this neglected human potential be unleashed?
Chapter Two: Literature Review

Approximately 3.5 million students graduate from high school in the United States each year. Estimates vary widely but as many as 1.3 million of their classmates leave high school each year before graduating (Count, 2010; High School Dropout Rates, 2015, November; National Center for Education Statistics. (n.d.). Retrieved July 24, 2017; Rumberger, 2011, p. 1). High School non-completion (HSNC) is a significant cost to individuals and society as a whole. The costs are financial as well as a lower quality of life and health (Heckman, Humphries, Veramendi & Urzua, 2014). Males are especially prone to this problem and make up the majority of HSNCs. Later, some HSNCs decide they want to go to college or join the military but cannot do so without a high school diploma or an equivalent certificate. The solution to the HSNC problem is touted to be a High School Equivalency Certificate (EC) such as the General Education Development (GED) certificate. For some, these alternatives can worsen the situation by increasing the HSNC rates because students feel the EC is easier and faster than staying in school for a regular graduation (Heckman, Humphries & Kautz, 2014).

This study examines educational issues that are particularly common to males. After a brief history and overview of the problem, this literature review is organized into four themes. Theme one is an overview of high school equivalency tests (ETs) and high school equivalency certificates (ECs). Theme two provides a summary of the literature describing the social and economic costs both to the person and society. Theme three looks at the causes of HSNC; why students leave high school and college prematurely. An understanding of the barriers, challenges, and cognitive-behavioral patterns that undermine student success can inform the interview questioning and interpreting of the data collected in the interviews. Finally, theme four looks at
what families, communities, and community colleges are doing to support students who are succeeding.

**History and Current State of High School Non-completion (HSNC)**

HSNC was the norm in the United States one hundred years ago when there were abundant manual labor jobs in industry and agriculture (Snyder, 1993). Today, international outsourcing, mechanization, and computerization have reduced the need for low-skilled labor. At the same time, outsourcing of low-skilled labor has increased the competition for jobs that can be done by the HSNC. A high school education, and often more, is needed for economic security and prosperity in the twenty-first century. A male HSNC will face reduced income and life satisfaction and be a burden on his fellow citizens as he consumes social services yet does not contribute through taxes. Heckman, Humphries, and Kautz (2014) found that EC holders who finish college have a life quality equal to any other college graduate. However, they also found that HSNCs who earn an EC (GED or equivalent) but later become college non-completers (CNCs) do no better than any HSNC in life. If that is the case, then ECs appear to make little difference, especially for males. It is critical to the lives of these men, their families, and their communities to identify what helps them succeed in college.

**The GED and Other ECs**

The GED was originally the only EC designed during World War II for veterans who left high school to fight before graduating (Heckman, Humphries & Kautz, 2014; Murnane, Willett & Boudett, 1997). Eighteen was the minimum required to take the test and the minimum age one could serve in the military. Those veterans differed from the majority of HSNCs today. Many of those veterans had grown up doing farm work. They had matured under years of military
discipline in life-and-death situations. They might have finished high school if there had not been
a war. They now needed an EC or a diploma to take advantage of the GI bill offering to pay for
college.

Higher HSNC rates caused by lower minimum age to take ETs. Later, when the
minimum age was lowered to 16, the HSNC rate increased as students reasoned that getting a
GED would be easier than staying in school two more years (Heckman, Humphries, LaFontaine,
et al. 2008). Getting out of work is a very different motivation for taking an ET than the veterans
had. It seemed reasonable at the time to offer the EC at the age when students could legally leave
school. They would have a credential to use in seeking employment. However, the increase in
the HSNC rate was unexpected. There is a feedback loop between school requirements and ET
difficulty. Raising school standards and graduation requirements increase the HSNC rate and the
desirability of the EC. Increasing the rigor of the ETs makes traditional graduation more
appealing and decreases the HSNC rate. Increasing the difficulty of the GED had an effect of
increasing the real graduation rate more for minorities than white students. For some, at a certain
level of test difficulty graduating becomes easier than passing an ET for some. The GED is
normed on college-bound high school seniors. The test was made increasingly difficult over the
years. In 1942, 80% of seniors could pass it, in 1982, 75%, in 1997, 67% and in 2002, 60%
(Heckman, Humphries & Kautz, 2014 p. 23). More recently 62.5% passed in 2011 (GED Testing
Service, 2012 as cited in Fuller, 2014, p. 3), 69% in 2012, and 75% in 2013. However, standards
were increased in 2014 and less than half the 2013 number of 800,000 took the test and under
40% passed (Mulhere, 2015, January 20). There is more competition from other EC testing
programs now which may alter the numbers and the quality of the pool of GED test takers as
some move to less expensive and possibly easier, or perceived to be easier, high school equivalency tests.

**Is the EC an easy way out?** Thus, the original intent of the GED to give more mature, hard-working veterans an alternate path to college has evolved into an easy way out of school for many. HSNCs and EC holders who become college non-completers (CNCs) contribute little financially to society and their families. They are, on average, a net drain on the financial resources of society. If the inefficacy of the EC were more widely known Would the high school graduation rate increase if the inefficacy of ECs was more widely known? Would it hurt the EC industry or help reform it?

**Multiple ETs.** There are three ETs to choose from in California and some other states; the General Education Development (GED) test, High School Equivalency Test (HiSET™) and Testing Assessing Secondary Completion (TASC) (High School Equivalency Tests [HSET], 2016, January 27). Massachusetts offers the HiSET™ and the GED (Educational Testing Service, 2017a; Massachusetts D.O.E. 2017, January 24). Reinhard and Harris (2013) list a number of tests in addition to the GED and HiSET™. McGraw-Hill offers Tests of Adult Basic Education (TABE®), which is aligned with the common-core, for a lower cost than the GED. The HiSET™ is replacing or presented as an alternative to the GED test in many states including Massachusetts. The Comprehensive Adult Student Assessment Systems (CASAS) produces tests. The National External Diploma Program (NEDP) requires students to apply the life skills they already have in real life situations. In addition to tests, there are alternative high schools and alternate ways to receive a high school diploma (Tyler & Lofstrom, 2009).

**Misleading GED information.** The GED testing service website states that 60% of graduates enrolled in college (GED testing service, Retrieved August 07, 2017). They do not tell
the reader that the vast majority leave college without a diploma. They claim a GED certificate leads to better jobs and more pay and will make life better for the GED holder’s children and even grandchildren. They switch from talking about GED recipients to stating that high school graduates have lower unemployment. Is this being compared to HSNCs? Does this also apply to GED recipients? The less informed prospective client may not notice that subtle switch from GED recipient to high school graduate. They imply that earning a GED is just like graduating from high school. Saying a GED certificate is equivalent to a high school diploma seems misleading because the evidence in the literature does not support that claim (Heckman, Humphries & Kautz, 2014). There is an informational video (Home, n.d.) that references a Wall Street Journal article (Pilon, 2010, June 25) that summarizes the findings of Heckman, Heckman, Humphries and Mader (2010). The video pull two points; that a GED has little value by itself without further education or training and that GED recipients lack the skills to succeed in higher education and the workplace. They change Heckman, Heckman, Humphries and Mader’s (2010) meaning of the word skills from noncognitive skills like persistence, motivation and reliability, to job skills. The video implies that those skills can be gained in in an adult education setting for job skills. The GED video glosses over the real issue of a deficit in soft skills, non-cognitive skills, or socio-emotional skills.

If a student can finish a degree or certificate of some sort, it will help but they still need socio-emotional skills to persist in a workplace (Heckman, Humphries & Kautz, 2014).

The GEDFast®. An online promotion of a new GEDFast® preparation program promises that you will pass your GED test after two weeks of preparation or your money back (GEDFast®, Retrieved August 22, 2017). The claim to have helped over 10,000 students pass the GED on their first try appears impressive until you compare that with the several hundred
thousand students who pass the GED each year. The promotion makes frequent use of the words easy and faster playing to the belief that the GED is less work and time than a high school diploma. In the accompanying informational video, they say that GED holders and high school diploma holders earn $400,000 more than HSNCs in a 45-year career at $9000 more a year. They state that 20 million people have passed the GED and earned their high school diploma (they do not call it a credential). At the bottom of the first page, they have a disclaimer in a small font that says the GED is a trademark of the American Council on Education but that it does not endorse this website. They say they are GED instructors that have a new and better way to prepare for the exam. GED exams provide the content for the interactive question and answer program. If you miss a question, they give some review, and a similar question will come up later. They charge about $64 for access to the online review helps. There is a 40% off offer in August 2017 which brings the cost down under $40. There is an ironclad 100% money back guarantee if the student does not pass. They state that the GED has a 50% fail rate but say they have a 93.5% GED passing rate. If they only have to refund 6.5% of their sales, they should make a profit. The GED testing program should also make money if more students pay for their exams. The GED testing service now offers a free retake if a person fails (GED testing service, n.d.b. Retrieved August 07, 2017). There are still test center fees of $10 in Massachusetts. The GED testing centers will make money charging testing fees even when the GED retake itself is free. GED testing costs $125 in Massachusetts (GED testing service, n.d.c. Retrieved August 07, 2017). If the passing rates are higher, it makes the GED test more desirable as an option to finishing high school. There is little incentive to reveal that male GED certificate holders fair no better than HSNCs in life and do not earn an additional $400,000. It is the high school graduates who have the higher income (Heckman, Humphries & Kautz, 2014).
The GED program may do more harm than good. In any given year about half of HSNCs take an ET (most take the GED) and about half of them pass (Crissey & Bauman, 2012; Fuller, 2014; Mulhere, 2015, January 20). Of this 25% of HSNCs who become GED certificate holders, six years after earning the GED, 57% pursued no further education, and 37% enrolled in college but left before graduating (Heckman, Humphries & Kautz, 2014 p. 201-202). GED certificate holders may increase college enrollment temporarily by up to 8%, but then most do not continue in school (Jepsen, Mueser & Troske, 2016). Heckman, Humphries, and Kautz (2014 p. 202) found that only 1.7% of GED passers received a vocational certificate, 2% earned a two-year associates degree, 1.3% of GED holders earned a four-year bachelor’s degree, and only 0.1% earned a master’s degree. These figures total approximately 5% of those earning the GED. The other 95% of GED holders failed to earn a post-secondary credential in spite of having academic ability equal to a regular high school graduate as verified by passing the GED test. This is 5% of the 25% (calculated above) of all HSNCs who pass the GED. Twenty-five percent of 5% means only a little more than 1% of all HSNCs earn a college diploma or vocational certificate. Those in that 1% can look forward to as a bright future as any college graduate. However, the vast majority of the male HSNCs with a GED are no better off than HSNCs who did not earn a GED (Heckman, Humphries & Kautz, 2014). In addition, they have lost time and money studying and taking ETs.

New grading of the GED. As of 2016 the GED has three levels that the test creators believe equate to high school graduates at three different levels (Big Changes To The GED Test Score Levels, 2016). They lowered the passing score from 150 to 145 for a basic high school equivalency certificate. A score of 165 is considered College Ready and 175 is College Ready Plus Credit or equal to AP students. These three levels may better communicate the academic
skill level of a GED holder to colleges. On their website, they highlight that some of their graduates outperform high school graduates in that fewer need remedial classes. They avoided claiming that GED graduates do as well as high school graduates in college, or in life. The lower passing score will allow thousands of students to be classified by schools as graduates, raising graduation rates. However, making the ET harder or scoring it on a different scale assumes that it is academic knowledge alone that is needed to succeed in college and the work world. While basic literacy and numeracy are minimal requirements for most jobs, other skills and personality traits are needed to succeed (Duckworth & Seligman, 2005; Heckman, Humphries & Kautz, 2014). The ET does not measure those socio-emotional skills needed for most jobs and other life demands from parenting to productive community, national and global citizenship (Dweck, 2006; Heckman, Humphries & Kautz, 2014). Duckworth and Yeager (2015) discuss a number of challenges measuring socio-emotional skills face, including what to call those traits and beliefs.

**More attend college.** Digest of Education Statistics (2015) reported that the total number of male college graduates almost doubled from 494,424 in 1977 to 801,692 in 2014. White students (and white males in particular) make up a lower percentage of 2014 graduates than those who graduated in 1977. The number of black college graduates has more than doubled since 1977 (25,147 to 68,259). Hispanic graduates have increased from about 10,000 to over 80,000 These data seem to show a decrease in the gap between white students and those of color. White males made the least progress going from 438,161 (48% of the total) in 1977 to 535,839 (29%) in 2014. Communicating the data in this manner gives a more positive picture for students of color than that presented by Heckman, Humphries, and Kautz (2014) who focused more on economic outcomes after schooling.
**EC programs make schools look better than they are.** Many high school administrators are in favor of offering EC programs during school hours because it makes their graduation rates look better. It also allows them to remove students from the classroom who are more challenging to teach and control. However, in 1974 in California, when GED certification programs were offered during school hours and in their high school buildings, the HSNC rate increased by 3% (Heckman, Humphries, LaFontaine et al., 2008, para. 8). At the same time, the number of individuals seeking GED certification only increased 1.7% (Heckman, Humphries, LaFontaine et al. 2008). In neighboring Oregon in 2001 HSNC rates increased 4% (Heckman, Humphries, LaFontaine et al. 2008, para. 7). This suggests that in-school programs do more harm than good because the increase in the number of HSNCs exceeds the small number who succeed in earning a postsecondary certificate or degree. Programs offered outside of school did not affect rates of HSNC (Heckman, Humphries, LaFontaine et al. 2008). A three or four percent increase in the HSNC rate of a million HSNCs means at least 30,000 more HSNCs. If a little more than 1% of EC holders finish a postsecondary degree or credential that would be about 10,000 graduates. Assuming an average college graduate earns two million dollars in a lifetime and pays 20% or 25% in taxes that is about a half million dollars, about the same that one HSNC costs society. Thus their economic contributions would be canceled by the 30,000 extra HSNCs. The EC programs appear to be a net financial loss to society and to the vast majority of the young men who pay for them.

**Higher standards, higher HSNC rates.** When school standards rise, and they require exit exams for a diploma, HSNC rates also rise and an EC becomes more attractive (Heckman & Lafontaine, 2010b). Heckman, Humphries, and Kautz (2014) reported that the GED program produces about 12% of high school graduates nationally, down from a high of 18% of graduates
as the GED test has become more difficult. If students see completing high school to be the
easier alternative path to earning a diploma it should reduce the HSNC rate. The common
denominator appears to be finding the easiest way to graduate.

**Free GED retakes.** The GED testing service offers a free retake if a person fails (GED
testing service, n.d.b. Retrieved August 07, 2017). There are still test center fees of $10 in
Massachusetts. Thus the GED testing service makes more profit because fewer pass the more
difficult tests and need to retake them. GED testing costs $125 in Massachusetts (GED testing
service, n.d.c. Retrieved August 07, 2017). The HiSET is about $100 (Educational Testing
Service, 2017b).

**Defining High School and College Non-completion**

Measuring HSNC and CNC rates is complex and varied (Stark & Noel, 2015). It is not
always clear what criteria are being used to define an HSNC or CNC. Schools feel pressure to
publish high graduation rates, so they usually include as graduates those who pass an ET.
However, the actual number of people without a diploma is what negatively impacts society.

**How HSNC rates are measured.** National high school graduation rates have been
reported as high as 93.5% (Fry, 2014; Kena et al., 2016) and as low as 70% (Greene & Winters,
2006; Greene, 2001; Heckman, Humphries & Mader, 2010a, p.9). Gasper, DeLuca, and Estacion
(2012) reported that 12% of youth had not graduated from high school by their early twenties but
if EC recipients are not counted as graduates, this jumps to 20%. Graduation rates in some
Hispanic majority schools have been estimated as low as 59% (Fry, 2010, p. 6) and even 50%
(Dillon, 2009; Greene & Winter 2006, exec summary). For Hispanic and African American
males, the graduation rate in 2003 was under 50% (Greene & Winter, 2006). Fifty-two percent of
foreign-born Hispanics leave high school compared to 25% of native-born Hispanics. For
political and funding reasons the lower HSNC rates are preferred by most schools. The number of students attending and the quality of the schools (which is partly measured by graduation rates) are the determinants of federal and state funding levels.

**The adjusted cohort graduation rate (ACGR).** Some schools compare the estimated attendance in ninth grade to the number of graduates four years later (Fry, 2014, p.174; Stark & Noel, 2015). Fry (2014) reported a graduation rate of 81% for 2012. However, this method does not catch those who left school before ninth grade. Up to 14% of Boston Public Latino students left school in sixth, seventh, and eighth grade (Lavan & Uriarte, 2008, cited in Gandara and Contreras, 2009, p. 23). If a student is held back two years he will be close to 16, the legal age to leave school, at the end of eighth grade. Many never reach ninth grade. These numbers are not included in most HSMC rates. The greatest exit from school happens in ninth grade, especially for males (Stearns & Glennie, 2006).

**Many leave school before ninth grade.** By comparing the number of eighth graders to graduates four years later Greene (2001) calculated that the actual graduation rate is closer to 70% overall: 78% white, 56% African-American and 54% Latino. This number includes EC as graduates so the real graduation rate may be at least 10% lower. A few years later Greene and Winter (2006) calculated the overall graduation rate in 2003 as 70% again; still, 78% of white students but African American and Latino rates fell a point each. If a 70% graduation rate produced approximately 3.5 million high school graduates (Greene & Winters, 2006; Greene, 2001), then the 30% who do not graduate would equal roughly 1.5 million HSNCs. If the graduation rate was 93% (Fry, 2014; Kena et al., 2015) then only about 260,000 were HSNCs. The latter rate includes EC holders with high school graduates and is therefore misleading.
The status HSNC rate. Another way to estimate graduation rates is to compare the number of American adults over 18 with or without a high school diploma or EC (40 million) to the total population over 18 (about 200 million) (Howden & Meyer, 2010, US census as cited in Fuller, 2014, p. 3). This would mean about 20% are HSNCs, indicating an 80% graduation rate. Twenty percent is still a large number of people without the education (and possibly the socio-emotional skills) needed for success in the labor market. This rate is easier to calculate and it may reflect the true potential economic income impact on society. If the census does not count undocumented people the estimate may be low.

The event HSNC rate. Stark and Noel (2015) defined this as the number of students who leave school between the beginning of one school year to the next. This rate includes EC holders as graduates thus it seems less useful for school budgeting and planning as well as measuring the impact of HSNC on society.

Mobility distorts high school graduation rates. An additional problem lies in accounting for students who move and do not reenroll in any school or claim to do homeschooling if they are under age 16. Students who relocate have a higher chance of becoming HSNCs (Gasper, DeLuca & Estacion, 2012). These HSNCs may not be included in the official data. This author has personal knowledge of administrators who encouraged parents to home-school students with behavioral or academic problems. This was done before state standardized tests are administered. The intent was that these homeschoolers would not take the standardized assessments and bring down school test averages or be counted in the behavioral records which are used to evaluate and rank schools. They are not counted as HSNCs as they are technically transferring to another educational setting. The administrators were exasperated after multiple attempts to work with some of these students who refused to cooperate. They did not
feel it was right to have their school academic and discipline statistics lowered by students who refused help. The likelihood is low that parents, who could not control their children enough to keep them in school, will succeed in homeschooling that same disruptive student at home. The result is young men without diplomas, or who have a diploma signed by their parents.

Lower standards, more seat time. An additional issue is the quality of the education in the United States. Removing high school exit exams in California, resulted in a higher graduation rate in 2015 (Leal, 2016, May 17). Lower academic standards are not all bad news because academic knowledge does not correlate with job performance as much as socio-emotional skills. Seat-time is not a meaningless measure of preparation for life. A student who stays in school, even if he learns little academically, at least learns to be on time, get along with peers and teachers and respond appropriately to social norms and authority.

Community college completion rates. Community college completion rates are even poorer, 25% and lower (Bers & Schuetz, 2014) in spite of having a self-selected population. The Regional Community College (RCC) reported an 18% graduation rate for 2015 (NSCC Statistics. n.d. Retrieved April 26, 2017). This number only includes those who earn an associate’s degree in 4 years. However, this does not reflect the actual success of many students who take longer or successfully transfer to a four-year school without officially graduating with an associate’s degree. The cohort that entered in 2009 had a 23.1% associate degree graduation rate within 6 years. Another 4.4% earned certificates. About half of those earning degrees or certificates transferred to a four-year school to continue their education. In addition, 22% transferred without any official diploma or certificate (Voluntary Framework of Accountability, 17 May 2016). Transfer students could still be considered successful since their goal is a four-year degree. Totaling these percentages brings the percent who graduate or transfer
closer to 50%. This number does not include the 6% who were still enrolled at RCC and may graduate or transfer at a later date. This would be a 56% success rate for the 2009 cohort. This report did not separate out high school graduates from those who entered RCC with an EC, nor did it compare male and female rates. RCC has higher completion and retention rates than the state averages but females outperform males (Gentile, 2016a).

In an August 20, 2019 email the president of RCC reported the most recent unpublished data from the Voluntary Framework of Accountability (VFA). The president added the 4.7% still enrolled after six years to the successful transfers, certificate and degree earners to get a total of 59.6% success rate for the cohort of students who entered RCC in 2012. This is consistent with previous data reported above.

**Counting EC Holders as High School Graduates Conceals the High HSNC Reality**

U.S. Census data, which count EC holders as graduates, are used to report increases in graduation rates (High School Dropout Rates, 2015, November). The picture is believed to be improving, especially for African Americans and Hispanics. However, if those data include EC holders, the graduation rates may be inflated and not accurately reflect the actual personal and social impact of education if EC holders have life outcomes more similar to HSNCs (Heckman, Humphries & Kautz, 2014).

Official U.S. government statistics continue to tout rising graduation rates, but they include EC holders with regular high school graduates (McFarland, Stark & Cui, 2016). The Pew Research Center graph below gives the impressions that the gaps are getting smaller, but it combines EC holders with high school graduates.
Figure 7.1 U.S. High School Dropout Rate Including and Excluding GED Recipients, 1968–2005

(Heckman, Humphries & Kautz, 2014, p. 297)
The Army no longer accepts the GED. The Army no longer accepts the GED as equivalent to a high school diploma (Tuck, 2012). Fewer employers consider a GED the same as a high school diploma. In response to feedback from the business community, the GED was rewritten in 2002 and passing scores raised with input from a number of corporations who hired GED recipients. These corporations had expressed dissatisfaction with the work habits of GED recipients (Tuck, 2012). However, ETs do not specifically measure work habits. Heckman Humphries and Kautz (2014 p. 141) noted that there are skills needed for high school graduation that are not measured by standardized tests. It takes some effort to prepare for and pass the

**Masking the scope of the HSNC problem.** The extent of the HSNC problem for all males is masked by counting GED recipients as graduates. It hides the data that show they do no better than HSNCs who do not earn GEDs in important life outcomes such as employment, income, health, and staying out of prison (Heckman, Humphries & Kautz, 2014; Jepsen, Mueser & Troske, 2016). The comparative economic success and larger numbers of high school graduates conceal the poor performance of EC holders when averaged together and compared to HSNCs. For example, if EC holders are grouped with high school graduates their average 2013 annual earnings are about $46,000, almost twice the $26,000 of HSNCs (McFarland, Stark & Cui, 2016). However, if EC holders are separated from high school graduates, the data show that having an EC does little or nothing to improve the earning power of the vast majority of males: their earning power is much closer to HSNCs than to that of High School graduates (Heckman & Kautz, 2014, Cameron & Heckman, 1993; Kominski, 1990; Pawasarat & Quinn, 1994; Quinn, 1986).

**Black male HSNC rate underestimated.** The black male HSNC rate may be underestimated by 40% because many ECs are earned in prison (Ewert, Sykes & Pettit, 2014). The education crisis and gaps between white and students of color may be no better than it was 50 years ago (Heckman & Kautz, 2014, p. 9).

**Male EC holders do no better than HSNCs.** The lack of the hoped-for success of EC male students has been published in the literature since at least 1986 (Cameron & Heckman, 1993; Kominski, 1990; Pawasarat & Quinn, 1994; Quinn, 1986). Quinn found that 85% of EC holders left state schools in Wisconsin before the second year and that they performed worse
than the lowest 20% of high school graduates (Quinn, 1986). Is it due to a lack of academic
information or as Heckman, Humphries, and Kautz (2014) hypothesize, is it a deficit in socio-
emotional skills that underlies both HSNC and later negative life measures?

**Statistical manipulation hides the severity of the HSNC problem.** Heckman,
Humphries, and Kautz (2014, p. xi-xii.) accuse the American Council on Education (ACE) and
Pearson publishing, who produce and oversee the GED testing program, of waging a campaign
to conceal the failure of the GED program to improve lives. Of the 100 ACE employees, 27
work on the GED and 40% of the ACE income is from GED testing. The ACE put out counter-
arguments to dampen the scholarly articles revealing the poor performance of GED recipients.
The ACE also lobbied to have the United States Census include all EC holders in national
statistics as High School graduates, thus masking and concealing their low performance. The
ACE pushed to get the GED into high schools. The readily available GED programs induced
students to leave formal classes but still be counted as graduates. This made the school
performance look better and thus helped avoid the penalties of the No Child Left Behind Act
(Heckman, Humphries & Kautz, 2014, p. xii.). There was social and political desire to see better
numbers, even if they did not accurately reflect the reality of the condition of education in
America. In spite of media coverage (Pilon, 2010, June 25), why is this not well known?
Conclusion

The GED was originally designed to give hard working veterans who had returned from World War Two a high school equivalency certificate. The EC has evolved into an easy and fast way out of high school work for HSNCs as young as 16. The already high HSNC rate increased as the GED was offered in schools to current students. Official government statistics count ECs as high school diplomas, but they are far from equivalent. EC holders and HSNCs are very similar in life outcomes, much worse than high school graduates. By counting EC’s as diplomas, graduation rates seem to be increasing and the graduation gap between male students of color and white students appears to be closing. However, ECs mask the reality of little or no progress for male students of color in true graduation rates or in employment, income, crime rates and other life outcomes compared to HSNCs without ECs. This hides the serious HSNC problem for males, especially those of color. The GED program appears to do more harm than good.

The Costs of HSNC

HSNC has staggering financial costs. Belfield and Levin (2007) estimated that an HSNC would cost society $392,000 ($488,000 in 2019 dollars) over his lifetime due to increased incarceration, lost taxes compared to a high school graduate, and increased social services. If there are 40 (Howden & Meyer, 2010, Fuller, 2014, p. 3) to 60 (Greene & Winters, 2006; Greene, 2001) million HSNCs in the United States and each cost society a half million dollars that totals 20 to 30 trillion dollars over the working lifespan of 45 years (retiring at age 65). To put this in perspective, the national debt has been increasing over the last 45 years from under $400 billion to over $20 trillion as of September 8, 2017 (TreasuryDirect, 2015, October 28). Is this just a coincidence? There are many causes for the national debt, not just lost tax income and the cost of social services, there have been costly wars as well. However, as a motivation for
better investment in education, this estimate could raise awareness of the cost of HSNC and increase support for finding and implementing proven interventions that decrease the HSNC rate.

The $20 trillion figure does not include the waste of educational resources and the emotional and academic tolls to teachers and fellow students that unmotivated, disruptive students cause. Nor does it include the loss of taxes from failing to attain a college degree. At an average income of over $50,000 a year (Tuttle, 2017, May 12), college graduates in a 14% federal tax rate bracket (Jasthi, 2015, April 8) would pay over $7,000 a year or $300,000 in federal taxes by age 65. Add local, state, social security, Medicare, real estate and sales taxes and the total is over $20,000 a year (The College Board, 2017) or $800,000 over a 41 year working lifetime. This is $500,000 more than a high school graduate. When added to the $488,000 lost to HSNCs the net difference between a college graduate and a HSNC, including those who earn an EC but then become CNCs is more than a million dollars over a lifetime (Able & Deitz, 2014).

If HSNCs graduated and finished college at a similar rate to their peers who graduate, then about 33% or more of the 1.3 million HSNC’s would have college degrees (Bauman & Ryan, 2016). Thirty-three percent of 1.3 million HSNCs is over 400,000 more college graduates. However, 33% of HSNCs graduating from college is unlikely unless we understand what really causes HSNC and CNC and address it successfully.

From a strictly monetary perspective, it would cost society $40,000 or less to keep a student in school until graduation (many HSNCs leave around ninth grade, four years at $10,000 per year equals $40,000). Theoretically, that could save society $392,000 ($488,000 in 2019 dollars) in lost taxes and public services. Also, the HSNCs miss out on a million dollars of income, and another half to one million in home equity, over their lifetime. Society loses their
productivity and the economic growth that could result. The loss may be much greater than half a million dollars if generational poverty results. Great grandchildren may benefit from the choices of their great grandparents.

**HSNC has staggering social costs.** Belfield and Levin (2007) studied data from California and concluded the state lost 1.1 billion dollars due to crimes committed by HSNCs, mostly males. Over 50% of inmates in California are HSNCs. Black HSNCs have three times the incarceration rate of Black high school graduates and six to eight times greater rates than White HSNCs (Belfield & Levin, 2007). Nationally, half of 16 to 24-year-old HSNCs are unemployed, have higher rates of incarceration, poorer health, higher divorce rates and their children are more likely to become HSNCs (Gasper, DeLuca & Estacion, 2012; Sum, Khatiwada, McLaughlin, and Palma, 2009). High-achieving students tend to come from two-parent families where both are college educated. College education tends to be a protective factor against divorce (Reardon, 2013). HSNCs have higher divorce rates (Heckman, Humphries & Kautz, 2014; Teachman, 2002). Children of divorced parents have higher divorce rates (Teachman, 2002). Divorce often leads to lower Socio-economic Status (SES) (Wood, Repetti & Roesch, 2004). Low SES parents have less influence over their children their parent involvement has no measurable positive impact on preventing their children from becoming HSNCs (McNeal, 1999). HSNCs continue the multigenerational HSNC cycle caused partly by and causing higher divorce rates and lower SES (Heckman, Humphries & Kautz, 2014; Teachman, 2002).

**The cost of crime.** D. Anderson (2012) estimated that the cost of crime and corruption might be as much as 3.2 trillion dollars per year in the United States, more than is spent on health care (D. Anderson, 2012). D. Anderson’s estimate included incarceration, the associated social costs of crime, the cost of more law enforcement, and increased security measures in businesses.
D. Anderson estimates that time worth 164 billion dollars is lost just opening and locking business doors in a typical year (2006). A career criminal can cost society as much as a million dollars over his or her lifetime (Cohen, & Piquero, 2009). The cost to society of a typical murder in 2004 ranged from five million dollars to as high as 11 million dollars (Cohen et al., 2004). These losses do not include the potential negative influence on children of HSNCs who may repeat the same life-cycle (Heckman, Humphries & Kautz 2014 p. 153-154).

**Few HSNCs succeed in life financially.** Of the few HSNCs who have passed the GED test, only 2% complete an associate’s degree and 1.3% complete college (Heckman, Humphries & Kautz 2014 p. 202). The second early leaving, this time from college, is an additional financial loss due to the payment of tuition with no return, whether done with scholarships or out of the students’ personal resources. Also, there may also be lost earnings if the student goes to part-time employment or leaves the workforce entirely. Finally, the government loses taxes because the earning potential of a college graduate is about twice that of a high school graduate.

**HSNCs harm the educational system.** The HSNCs often check out mentally in middle school and spend the next few years consuming educational resources, disrupting or degrading the education of others, and stressing teachers who try to motivate and teach them (Segal, 2013). HSNCs have not just missed their last two years of schooling but probably most of the previous four or five years. It follows that students are less engaged in college preparatory classes if they are not planning to go to college. They waste billions in educational resources, degrade the pro-educational positive peer influence in class as well as after school. They consume extra teacher energy and time for class management needed for other educational activities. Poor student behavior and reduced motivation contribute to teacher burnout and turnover (Friedman, 1995). Negative behavior may be a two-way street as the schools may have failed these young men
early on as boys, creating a downward spiral. Society could have aided boys who start schooling socioemotionally and academically behind with early preschool education and socio-emotional skill training. There is enough blame to go around.

**Non-monetary costs of HSNC.** In addition to quantifiable costs, HSNCs miss out on many of the benefits of education. Among the many social benefits of education are reduced rates of crime, more income from legitimate work, and the development of increased patience along with decreased levels of risky behaviors (Oreopulus, 2007). Their high divorce rates (Gasper, DeLuca & Estacion, 2012; Sum, Khatiwada, McLaughlin, and Palma, 2009) result in more single parent homes with the associated problems, such as higher crime rates and generational poverty.

Gallup polls reveal that the more education people have, the more likely they will believe that humans are causing Climate Change and Global Warming (Dunlap, 2016, March 28; Saad, 2014). Another Gallup poll showed that the more education people had, the less likely they would support the decision to go to war in Iraq (Moore, 2003). More educated males are also less racist, homophobic, and sexist (Weis, 2004). Thus the converse is true; HSNCs are more racist, homophobic, sexist, and deny Climate Change.

**Conclusion**

This section of the literature revealed that, in a modern technological society, the failure to graduate from high school leaves young males at a life-long disadvantage in the workplace. Millions of HSNC males struggle to find work and keep it. They are more likely to resort to crime and end up incarcerated, incurring severe costs for these individuals and society in general. The average male HSNC may cost society a $392,000 ($488,000 in 2019 dollars) over a lifetime
and his children are more likely to do the same. Also, men with anti-social attitudes who vote with a more limited understanding of the way the world works degrade our democracy.

The EC was developed to give HSNCs a second chance. Unfortunately, the vast majority of males who earn a GED never complete college, and their life prospects are no better than HSNCs who never earn an EC. Counting EC holders as high school graduates hides the large gap between races in high school graduation rates. It also hides the wage gap between EC holders and high school graduates. EC programs appear to be mistaken in assuming that a basic level of academic skills and knowledge is all that is needed to succeed in college. On the other hand, if a young male earns the EC and succeeds in college, his life prospects are equal to those of any college graduate, and the negative economic impacts of his HSNC are virtually erased (Heckman, Humphries & Kautz, 2014). It is vital to understand the experiences and perceptions of those who are succeeding in college. This understanding could lead to the development of more successful interventions resulting in more equity and social justice.

**Causes of High School and College Non-completion (CNC)**

Understanding the causes of HSNC and CNC provides insights into what HSNC students who have been able to attend college need to succeed. To better conceptualize what is helping the HSNC succeed in college it is necessary to have a clear picture of what caused him to fail to complete secondary school. The causes of HSNC and CNC are varied and often interrelated, spanning individual psychological and behavioral issues to the broader systemic issues of racism and classism; the latter issues bring HSNC and CNC into the realm of social justice. We must know the full range of causes to develop effective interventions and supports.

High school and college non-completion have some causes that are unique to each level, but many of the causes are similar. Theme three examines the multiple causes of HSNC and
CNC. Many of these act in concert in a young man’s life. Intersectionality of any of these factors increases complexity and makes finding simple solutions more difficult. Theme three concludes with some causes unique to college students. The following factors are examined: (a) sexism and misandry; (b) racism; (c) social class issues; (d) social justice issues and; (e) psychological and socio-emotional causes including boredom, low motivation, low self-control, and mental and physical health issues. The final part of this section looks at causes more specific to college students: (f) financial issues (g) class schedules conflict with work and family needs and (h) increased time and cost of remedial classes.

**Sexism and Misandry**

Farrell and Sterba (2008) point out that while men and women both enjoy the benefits voting in a free democratic society, only men are required to register for the draft. They may kill or be killed *before* they ever have a chance to vote (18 to 20-year-olds, depending on the election cycle). To be killed is the ultimate taxation without representation. Equal rights should also mean equal responsibilities. On the flip side, when there is no draft, men choose to enlist in the military more often than women as an alternative to unemployment and as a way to finance college.

According to Nathanson and Young (2015, 2006, 2001), the new misandry may have started as a fight for women’s equal rights but went further to debasing men and cultivating hate for men. They document a litany of negative male stereotypes in American media and culture. Whaley (2017, June 04) interviewed a young male high school graduate who expressed a concern that the female college culture vilifies and stereotypes men as rapists.

**Legal bias and males.** Is the legal system biased against males, or is male behavior more antisocial? Behavior that is rewarded on the football field or the battlefield is not valued in the classroom. This gender bias exceeds any racial bias documented. Men are more likely to receive
much longer prison time for the same crimes than women (Doerner & Demuth, 2014; Starr, 2014; Hofer, Loeffler, Blackwell & Valentino, 2004, p. 127). The school to prison pipeline is mostly filled with males. Child support is awarded to women 94% of the time. Women receive the children eight-five% of the time (Grall, 2013). This limits male role models or father figures in boy’s lives. Women are less likely to pay child support due even though it is usually much less than the average man is required to pay (Grall, 2013). Boys are not sure it is worth working hard in school to get a good job when they see their fathers losing everything in a divorce.

**Male issues.** For several decades now, dozens of books addressing the issues boys and men face have been published. These books all conclude that boys are not being treated fairly or equally and it is negatively affecting their lives. Some titles are: *The myth of male power: Why men are the disposable sex* (Farrell, 1993), *Real boys: Rescuing our sons from the myths of boyhood* (Pollack, 1999), *Raising Cain: Protecting the emotional life of boys* (Kindlon & Thompson, 2000), *The trouble with boys: A surprising report card on our sons, their problems at school, and what parents and educators must do* (Tyre, 2009), *The war against boys: How misguided feminism is harming our young men* (Sommers, 2001), to name a few.

Boys experiencing academic failure disengage and put their energy into other pursuits (Mulvey, 2010). As schools cut back on recess and Physical Education, active boys have fewer constructive outlets for their energy and more disciplinary issues (Farrell and Sterba, 2008). According to Sommers (2001), school has been feminized. There is more reading, writing and sitting still. This may be why more males play action video games where they can experience a form of success. Boys are more likely to have developmental delays and that can lead to behavior problems (Will & Wilson, 2014). Across the developed world boys are behind girls in the vast majority of countries (Stoet & Geary, 2015). When gender achievement gaps intersect
with racial gaps, the result is seen most severely in boys of color (Watson, A., Kehler, M., & Martino, W. (2010).

**Racism**

Issues related to race and racism usually increase the HSNC rates for students of color and increase the attractiveness of an EC. Systemic poverty and racism could impact student attitudes towards authority figures and governmental institutions as well as the authorities’ attitudes toward students (DeCuir & Dixson, 2004; Mauer & King, 2007). Students of color who better negotiate encounters with racist attitudes do better at succeeding (Engle and Tinto, 2008). Mauer and King (2007) reported that as of 2005 about 900,000 of the 2.2 million inmates in the United States are African American and, if trends continue, one in three African-American males will spend time in prison. This compares to about one in 30 non-Hispanic whites are in prison. Since 1980 California has built more than 20 prisons but only one university (Peterson, 2014, October 11).

Heckman, Humphries, LaFontaine and Rodriguez (2008) found that students of color have fewer credits and are older on average than white students when they enter twelfth grade. Jimerson, Ferguson, Whipple, Anderson, and Dalton (2002) found that forcing students to repeat a grade for academic reasons increases their chances of becoming HSNCs. Retaining 2.5 million students each year may cost taxpayers $14 billion in extra educational costs. This makes the GED option more attractive to school administrations and to students of color, increasing their HSNC rate. Institutional racism in school discipline has increased HSNC rates for males of color and even increased incarceration rates (Metze, 2012). With zero tolerance and police officers at many schools the *school-to-prison pipeline* gets very short. What is a school and family issue at a suburban school without zero tolerance and officers on campus now becomes a matter
involving government officials resulting in a criminal record and even jail time (Hirschfield, 2008; Metze, 2012; McIntosh, Girvan, Horner & Smolkowski, 2014).

Some students of color have expressed that they feel pushed out of school by constant negative interactions with adults (Metze, 2012). Students of color experience more corporal punishment, suspensions, and expulsions to alternative schools at higher rates than white or Asian students increasing the likelihood of their leaving school (Metze, 2012; Monroe, 2006). Students subjected to corporal punishment and out-of-school suspensions had lower test scores; students with one or more disciplinary incidents in school were 24% more likely to be involved with the legal system (Metze, 2012). Students of color have rates of suspensions two to five times higher than whites and Asians (Wallace, Goodkind, Wallace and Bachman, 2008). This may be due to a combination of student aggression and disengagement along with systemic racial bias and community violence, not just one or the other (Gregory, Skiba & Noguera, 2010). Suspensions are correlated inversely with lower graduation rates. Incarceration precludes high school attendance and graduation in most instances but increases the percentage of men of color who earn ECs.

**Racial disparity in the judicial system.** Mauer and King (2007) reported that as of 2005 the United States has more people in prison than any other nation now or in history Incarceration for nonviolent vice (especially drug use) has increased prison populations 500% since 1970 to record levels. The prison population is disproportionally minorities and males. When these men are taken out of the community their families are disrupted, the community is fractured and unable to resist violent gang influences (Roberts, 2004). In a stable society or neighborhood, the adults look out for the youth (Mauer & King, 2007). Males of color in poor urban neighborhoods have fewer educational resources and little or no opportunities for employment (Mauer & King,
2007). When released from prison they now have criminal record and are less able to get work than before they went to prison. Illicit ways of getting money are all they see available to care for their families (Mauer & King, 2007). More severe penalties for selling forms of drugs more common in poor urban areas leads to higher rates of black male incarceration (Hofer, Loeffler, Blackwell & Valentino, 2004, p. 156; Roberts, 2004). These men are sometimes no longer allowed to vote which can increase a feeling of alienation. They are then subject to laws they have no representation in forming. If HSNC can be prevented, it saves money, lives, families, and whole communities. Roberts (2004) questioned the wisdom of incarceration: if it is ultimately to protect the community, it is self-defeating.

Social Class Issues

Willis (1981, 1977) presented the idea that working-class students grow up to get working-class jobs (in Great Britain) even if they are offered a college preparatory education. This is partly the preference and choice of the working class students themselves. While being poor does not always equate with being a member of the working class, it is more likely to. Poverty is also correlated with lower education levels and graduation rates (Korn, 2015). Reardon (2011) found the achievement gap between children in the top 10% of family incomes and the bottom 10% is twice as great as that between white and black students. Fifty years ago, the racial achievement gap was greater, but now SES or class differences are bigger educational problems than racial issues. Reardon attributed the growing gap partly to the widening income gap over that period. Family difference in income is correlated with student achievement almost as highly as parental educational attainment. The gap between the lowest and the middle income stayed about the same but it was the achievement gap between the middle income and the highest that increased. Reardon argued that what caused this achievement gap was not income itself but
how that income was used to cultivate children’s intellectual and socio-emotional development. Wealthier parents spent more time as well as money, especially from birth through the preschool years, on their children. Lareau (2011) concluded that the differential quality of parental interactions with their children results in differential intellectual development. Lareau found that middle-class parents talked and reasoned more with their children, and they supported intellectual as well as physical development. Working class and poorer parents are more directive in communication and focus on physical survival and growth. This echoes the observations of Heath (1983) in her classic ethnographic study that found working-class adults more often give children orders whereas middle-class adults asked questions and interacted intellectually with their children. The latter communication style was similar to middle-class classrooms and prepared children for success in that environment whereas the former created a mismatch.

A Social Justice Issue

At a time when more education is needed to survive and thrive in highly technological economies (Reder, 1999), the United States has one of the highest HSNC rates in the developed world. The diminished economic and social contributions of male HSNCs represent a major societal, educational and personal loss. ECs could be a partial solution if the EC holder graduates from college or gets other training. However, in spite the goal of EC programs to prepare men for college, only about 1% of all HSNCs graduate from college (Heckman, Humphries & Kautz, 2014). The wasted time and money spent by poor HSNCs on the nearly empty promise that earning an EC will increase life success is deceptive and thus constitutes a social justice issue. Johnson and Rochkind (2009) found that the inability of colleges to help students, especially those with fewer financial resources, balance work and school led students to leave college, they
called this a moral challenge. According to Heckman, Humphries and Kautz (2014) including GED recipients as high school graduates gives the impression that the Black-White graduation gap is getting smaller. In reality, it is increasing as more Black and Hispanic students forgo a high school diploma and earn a GED certificate instead, some while in prison (Heckman, Humphries & Kautz, 2014). If GED recipients are not counted as graduates, the male African-American graduation rate was no better in the 21st century than in 1950 and the gap has not gotten closer for the last 35 years (Heckman, Humphries & Kautz, 2014; Heckman & LaFontaine, 2010b). Heckman and LaFontaine’s (2008) analysis of the data reveal the decline in the real high school graduation rates that has been consistently concealed by including EC holders as graduates. According to Tuck, (2012), the GED has been used by some urban youth as a way to escape poor urban schools. In 1964, HSNCs earned 64% of what high school graduates did: 40 years later that dropped to 37% (Rouse, 2005, p. 1). Not only is money being taken from the poorest members of society for tuition, books and lost labor, but there is little if any return on their investment. It also misleads young men and schools into thinking that academic knowledge alone will inevitably lead to employment and financial success. Finally, Kearney and Levine (2014) found that low education levels in males increased the gap between affluent and poor, and reduced social mobility. The failure to get an education significantly hurts the men, their families, and the communities that need them. The children of these men are more likely to repeat the cycle, compounding the cost. Moore, Bridgeland, and DiLulio (2010) stated that in order to address poverty, reducing the education gap is the most effective place to invest resources.
Psychological and Socio-emotional Causes of Leaving School

Socio-emotional factors such as low motivation and poor behavior, not a lack of intelligence or academic ability, seem to play the major role in academic failure for most. Research has questioned the common assumption that students act out and misbehave when they struggle academically. McIntosh et al. (2008) found that misbehavior led to poor academic performance, but not vice versa.

Rossi and Bower (2016) found that in New York State, the predictors often used to predict college attendance of GED recipients did not correlate with actual outcomes. Regardless of state of employment, public assistance, proximity to the school, race, or marital status all had an equal likelihood of attending college. They suggest researching noncognitive traits. Socio-emotional skills such as grit and self-discipline are as important (if not more so) to academic and life success (Duckworth, 2016; Duckworth & Seligman, 2005; Gianessi, 2012; Heckman, Humphries & Kautz, 2014; Heckman & Rubinstein, 2001).

than a desire to succeed; conscientiousness and emotional stability were more important than IQ in predicting intellectual performance (Borghans, Golsteyn, Heckman & Humphries, 2011). Students who earned A's disliked homework as much as students who earned C's but they did it anyhow. Grit and self-control are also needed (Duckworth & Gross, 2014). Self-control and grit out-do IQ in academics (Duckworth & Seligman, 2005; Gianessi, 2012). Duckworth and Seligman (2005) and Gianessi (2012) define self-control as staying focused on long-term goals and acting consistently with them even when encountering appealing immediate rewards that are in conflict with the long-term goals. Duckworth, Peterson, Matthews and Kelly (2007) define grit as *passion and perseverance for a long-term goal*. Children with lower self-control had higher rates of teen pregnancy, HSNC, and smoking even when controlling for intelligence (Moffitt, et al., 2011). Heckman, Pinto and Savelyev (2012, 2013) also found that external behavior, especially violent behavior, predicted poor grades more than low IQ. Those external behaviors are associated with an inability to regulate, control one’s actions. Socio-emotional factors such as motivation and behavior seem to play the major role in academic failure for many, not a lack of intelligence or academic ability.

**Boredom and low motivation.** Many students are “bored” in school (Bridgeland, J. M., Dilulio Jr, & Morison, 2006; Yazzie-Mintz, 2007; Busteed, 2013). A 2012 Gallup survey of 500,000 students, grades five to 12 from 37 states, found a steady drop in engagement from 76% in fifth grade to 44% in twelfth grade (Busteed, 2013). Growth Mindset is associated with higher levels of engagement in in a study involving positive education and Chinese students (Zeng, Hou, & Peng, 2016). Thus, it is probable that the inverse is true; low Growth Mindset correlates with low levels of engagement. Low levels of student engagement correlate with high HSNC rates (Rumberger & Rotermund, 2012). Segal (2013) saw a connection between the decision to
go to college and increased energy put into school both in academics and prosocial behavior, which take more energy than failing and misbehaving (p.7). HSNCs put less energy into the elementary through high school years and thus may leave school far less prepared than high school graduates in both academic and socio-emotional skills.

Bridgeland, Dilulio Jr and Morison (2006) authored a report on HSNCs that summarized interviews with 467 HSNCs from communities with high rates of HSNC. They write that 78% of HSNCs had passing grades and three-fourths regretted leaving school. The most common reasons given for leaving school were that classes were not interesting, their academic failure resulted from frequent absence from classes, their peer group was not motivated to go to school, and that they needed more rules and supervision especially when it came to truancy (Bridgeland, Dilulio Jr & Morison, 2006).

**Self-control.** Mischel’s famous *marshmallow experiment* supports the importance of socio-emotional skills. Mischel, Ebbesen and Raskoff (1972) sat children in front of a cookie or marshmallow and then offered them a second one as a reward if they were able to wait 15 minutes until the researcher returned. They recorded the results and then followed the children into adulthood. Those who waited the full 15 minutes (about a third) had higher SAT scores, more success in education and even better weight management.

Mischel (1958, 1961) had performed a similar experiment over a decade earlier in the late 1950’s in Trinidad in the West Indies on African origin and East Indian origin children. Socio-economic status (SES) did not seem to be a factor, nor did race or culture. What correlated most strongly with stronger self-control was the presence of a father in the house (Mischel & Metzner, 1962)
Kidd, Palmeri, & Aslin. (2013) hypothesized that environmental factors may contribute to the child’s decision such as unreliable authority figures and a less reliable future may also contribute to the choice for instant rather than delayed gratification. This supports the importance of stable parental involvement in producing positive outcomes for students (Carpenter & Ramirez, 2007). It also is consistent with the need for positive role models as theorized in Social Cognitive Theory (Bandura, 2001). Men in prison are more likely to come from a fatherless home (Popenoe, 1999). Popenoe correlates an inability to delay gratification with fatherless homes. He lists some problems that result, and they include increased out-of-wedlock births, substance abuse, academic failure, crime, and general delinquency. This cycle can be reproduced for generations (Kalmijn, 2015).

**Effort matters.** Hsin and Xie (2014) found that Asian American and white students started school roughly equal, but after a number of years, Asian descent students, especially those with first generation parents, progressed faster, resulting in an achievement gap between Asian Americans and white students. They attributed this gap not to innate intelligence, but to greater student effort due to high parental involvement and pressure. This study controlled for demographic differences. They concluded that more authoritarian parenting styles with high expectations for their children to attend an elite college resulted in higher student motivation and effort. However, the Asian American students had fewer friends, more conflict with parents and did not feel as good about themselves as the white students did. The point of this study for closing achievement gaps is that effort matters and, according to Mindset theory, it results in greater intelligence. Can growth mindset thinking help prevent and close achievement gaps through extra effort?
It is not a lack of intelligence, rather risky behaviors. The cognitive ability of those who pass the GED is closer to high school graduates than to other HSNCs (Heckman, Humphries & Kautz, 2014). However, GED recipients are about the same as other HSNCs in risky behaviors such as early sexual activity, substance abuse, resorting to violence, committing minor and major crimes, poor attendance, low grades and being put in lower level classes (p. 32). High school graduates were much less likely to engage in risky behaviors. GED recipients are more likely to have mothers with lower levels of education and come from single-parent or broken homes (p. 34). By the age of six differences in noncognitive skills were observed. Once enlisted in the military HSNCs with the EC fail to complete their service at the same rates as HSNCs without an EC and at twice the rate of high school graduates (Murnane, Willett & Boudett, 1997; Pawasarat & Quinn, 1994). This was not due to lack of intelligence, rather socio-emotional skill deficits (Laurence, 2008; 1983).

Heckman, Moon, Pinto, Savelyev and Yavitz (2010c) followed a Perry Preschool Program cohort of particularly disadvantaged African American children up through age 40. The preschool was outside of Detroit; the majority of the parents had been born and educated in the south and migrated north for work. They rated the children on externalizing behaviors and motivation. The frequency of externalizing behaviors such as being aggressive towards others, stealing, swearing, disrupting class and encouraging others to misbehave was found to correlate with lower future earnings. Heckman, Pinto and Savelyev (2013) found that teaching socio-emotional skills by the Perry Preschool Program reduced externalized behavior (misbehavior) and had the strongest effect on positive future outcomes for students. Whitehurst (2016) is concerned that if soft skills are closely related to inherited personality traits, they will be hard to change. He favors clear teaching and enforcement of positive behaviors and norms. He
recommends that schools put their energy and resources into behaviors that have more direct impact on the educational environment. These include reducing disruptive behavior and having school-wide expectations for acceptable social behavior. Focusing particularly on students with behavioral issues and low self-management skills and providing training for (or remove) teachers who have more detrimental student-teacher interactions.

Self-control skills are best taught at a young age and can improve a child's long-term prospects (Gianessi, 2012; Moffitt et al., 2011). *Tools of the Mind Curriculum* (Tools of the Mind, 2017) based on Vygotsky’s educational theory, improved the behavior and achievement of preschoolers (Barnett et al., 2008). Self Determination Theory (Deci & Ryan, 2011) focuses on the role of the individual’s conscious decisions at any age to determine their future. It is never too late to learn self-control and develop grit (Duckworth & Seligman, 2005).

Johnson and Rochkind (2009, p.7) surveyed more than six hundred former students found that those who left college early were almost twice as likely as graduates to say that too much socializing and not enough studying (23% vs.14%) and having trouble paying attention in class (18% vs 9%) were factors that contributed to leaving college before graduating. Poor self-regulation and antisocial behavior are causes for leaving college before earning a credential.

**Mental health issues.** There are numerous mental health issues that can affect students and lead to poor grades and leaving school. Depression and Anxiety are the most common and on the rise (Smith, 2006). Nearly 40% of college women and 31% of men felt too depressed to function well within the last 12 months and about 10% of both males and females seriously considered committing suicide (ACHA-NCHA Data, 2016). These are the most common but many other mental health issues can increase the chances of HSNC or CNC. Depression can lead to HSNC (Dupéré, Dion, Nault-Brière, Archambault, Leventhal, & Lesage, 2018).
Physical health and substance abuse issues. Health issues may include depression and other psychological problems as well as physical sickness or injury (Smith, 2016) that cause a student to miss classes and fall behind. Substance abuse and smoking are associated with lower educational attainment and HSNC (Crone et al., 2003; Heckman 2013). HSNCs abuse drugs more than high school graduates. HSNCs experience more peer pressure to smoke compared to those with more education (Crone et al., 2003). Drugs and alcohol can affect memory and thus grades. I had a student who was absent for several weeks because he had violated his parole by smoking marijuana and was incarcerated. No-smoking policies in schools can impact graduation rates. Students who smoke run into disciplinary issues either for smoking on campus or for cutting class to smoke. Some students who smoke find it difficult to go 6 hours without smoking. This additional frustration with school can be the straw that breaks the camel’s back for the HSNC.

Financial Factors

Financial issues are self-reported as the number one reason for leaving college. Over 70% of the 4,500 nontraditional students surveyed by the Apollo Research Institute said financial issues are the top cause for leaving school prematurely (Schepp, 2016, July 14). Education has a higher reward for females than males because they can achieve a greater relative increase in standard of living. The higher paying, physically demanding dangerous careers such as firefighting and construction tend to draw more males. A Gallup poll reported that 72% of college admission officers felt the increasing debt deterred students from entering college (Calderon & Jones, 2016, October 06). Almost half of Regional Community College (RCC) students receive some financial aid and nearly half work full time (Gentile, 2016b). RCC conducted a hunger survey of 10% of the over 6,315 credit-earning students. No noncredit
students responded. About 10% of the student body took the survey. Fifty-three percent of respondents had low or very low food security and nearly 70% had experienced food and/or housing insecurity (Office of Planning, Research, Grants & Assessment, 2016). These figures may not represent the total student body since those experiencing food insecurity may have been more motivated to take a survey on that topic.

**Financial rewards of a diploma are less for males.** The educational economic return for males has not increased as rapidly as for females (Schwartz & Han, 2014). Men are less willing to carry as much debt and leave school sooner than women, even though leaving college will make the debt harder to repay (Dwyer, Hodson & McCloud, 2013). These self-reported responses do not reveal details of why the student has financial issues. Are loans unavailable? Were high school grades too low to qualify for grants and loans? Are they from lower SES families? Are there child care issues? These can all be ameliorated with more financial support.

Bers and Schuetz (2014) report that almost 50% of community college students leave school before the start of the second year. Ultimately only 25% of part-time and 34% of full-time students received a two-year degree. Of those that left, 60% were paying for college without parental help. Over 50% of students that quit reported needing to work more hours to qualify for medical benefits but that conflicted with class times. When students dropped to part time, they did not qualify for some scholarships. Eighty percent thought that more financial aid, health benefits and evening and weekend classes would prevent leaving school. Gandara and Contreras (2009) found that of those who took the SAT in 2004 the majority planned to be employed while in college. An even higher percentage of Latino students planned to work and apply for financial aid. Those who leave school early, as well as their parents, do not fully comprehend the effect it will have on their financial future (Johnson & Rochkind, 2009). If HSNCs could complete
another few semesters many will out-earn people with four-year Bachelor’s degrees (Carnevale & Cheah, 2015, 2013) and could pay back any loans or credit card debt. Many community college credentials are designed for specific careers in contrast to the liberal arts majors of four-year institutions. Young single females out-earn young males in 29 of 73 majors including engineering. Recent female college graduates earn 97% of the earning level their male counterparts (Bhattacharya, 5 Aug. 2015. Web. 01 Mar. 2017).

Is it really about the money? The problem with saying a lack of finances is the main reason for leaving college is that HSNCs also quit the military at high rates (Murnane, Willett & Boudett, 1997). The plea of “lack of finances” is not valid because the military stipends should keep them in the service. Thus, even though financial issues are often mentioned as the top cause for leaving college, the similar attrition rate from the military indicates that there are other factors at play (Laurence, 2008). It may be an attempt save face to blame finances instead of the problem of low discipline and self-control. Research found that lower income students already pay little or no tuition and that while financial aid increases enrollment it does not improve graduation rates unless the financial aid is linked to performance in college (Bettinger, 2004; Patel, Richburg-Hayes, de la Campa & Rudd, 2013; Soliz, 2016). Another study concluded that need-based financial aid did slightly increase graduation rates from 16% to 21% (Goldrick-Rab, Kelchen, Harris & Benson, 2016). Needs-based financial aid is still linked to performance in as much as the student must remain in school and pass classes.

Federal regulations have unintended negative impacts. There are new laws governing the use of federal money for community colleges. It includes rating colleges partly by retention rates. This is problematic for community colleges because many students transfer before they earn an associate’s degree or other credential. Others take some time off and return in a year but
if these are all classified as early leavers, the school may lose funding. This puts pressure on colleges to retain students, and if interventions do not increase the capacity of at-risk students, there is a danger that improved retention may come at the expense of high standards. With little pressure to maintain high standards and great pressure to retain (pass) students there will be pressure to inflate grades (Arum & Roksa, 2011). This lowering of the academic demands should reduce attrition due to poor grades but at what cost?

**Improving economy can cause HSNC and college non-completion (CNC).** The president of RCC attributes some of the decreased enrollment to the improving economy (President’s weekly message, personal communication, email to staff, Feb. 28, 2017). Students may leave high school or college if they can find work. They may not have the time to study when working full time and parenting, or they may be satisfied with the income they have and feel they do not need more education. Parental encouragement to leave school to earn income for the family (Gandara and Contreras, 2009) seems shortsighted since a graduate would be able to help the family more. Is this parental modeling of not delaying gratification itself leading to HSNC for their children? From a long-term economic perspective, the two years between being old enough to work and graduating from high school would be better spent in school and working part time, if necessary.

**Remedial classes increase time and cost.** HSNCs are often less prepared academically, either because they failed classes in high school or they forgot what they learned during the extra time between high school and college. About half of all college students will take remedial courses (Scott-Clayton & Rodriguez, 2014). Older students often had full-time jobs and attended part time. However, younger students who had to take remedial math or English were less likely
to graduate. Adding non-credit remedial classes at the start of a program makes the path to completion longer and thus more expensive and difficult leading to more CNC.

**Conclusion**

Causes of leaving high school before graduating vary from being bored and truant to being frequently suspended, or committing crime and being incarcerated. Racially biased discipline may increase the chances of male students of color becoming HSNCs. Societal misandry may make school an unwelcoming place for boys. Negative interactions with teachers, lack of tolerance for active young males push males out of secondary school. Pressures of poverty and low expectations also contribute to students leaving high school and college before graduation. Reasons students give for leaving college include work schedule conflicts and lack of financial resources. However, former HSNCs also leave the military at high rates, and they are being paid to stay. Therefore, the lack of finances may not be as important as other factors. The primary cause of the HSNC and CNC leaving school appears to be low socio-emotional skills such as grit, self-control and self-discipline (Duckworth & Seligman, 2005; Heckman, Humphries & Kautz, 2014).

**Protective Factors Supporting the EC Holder’s Success in College**

A number of studies have found that protective factors and interventions have been associated with academic success (Bushway, Krohn, Lizotte, Phillips, & Schmidt, 2013; McNeal, 1999; Risk & Protective Factors, 2017). Most of these factors are partially effective for all students, but the HSNC who earns a high school equivalency certificate (EC) is in special danger of failing college as well and needs more comprehensive support. The support and intervention needs are different for each individual, and each may benefit from a different
combination of assistance. High schools are generally more proactive in identifying and supporting at-risk students. Colleges are beginning to follow suit, but are more limited legally since most students are 18 or older and colleges are not allowed to report grades or issues to parents without the student’s permission. However, colleges are motivated by tuition income.

Limiting solutions either to the sociopolitical systemic sphere, or to the personal socio-emotional realm, often because of the philosophical or political agendas of those in leadership positions, may ultimately harm our children. Theme four examines the spectrum of supports and interventions currently available to many if not most students. The factors are arranged from the micro to the macro scale.

**Personal and Familial Protective Factors**

According to the *Students First Project* (Risk & Protective Factors, 2017) and the Perry Preschool Program (Heckman, Pinto & Savelyev, 2013) protective factors that exist at the individual level can be learned. These include internal locus of control, social competence, problem-solving skills, social skills, nutritional knowledge, optimism, moral beliefs, values, positive self-regard, and a positive coping style.

At the family level, protective factors include stable two-parent marriages, small family size, strong family ethics and responsibility, and economic security. Another familial protective factor is the establishment and maintenance of a good relationship with at least one parent. Parents with high socio-emotional skills are positive role models for their children. Two-parent families had decreased risk of drug use and violent behavior (Popenoe, 1999). Baskerville (2004), based on similar findings, concludes that it would be more effective to promote and restore fatherhood as a solution to social ills instead of harsher punishment or more antipoverty spending. This is only if the father has low levels of antisocial behavior (Jaffee, Moffitt, Caspi &
Taylor, 2003). Flor and Knapp (2001), meanwhile, found that parents that interact and discuss religion with their children are more likely to pass on those beliefs.

**School and Community Protective Factors**

School-level protective factors include a sense of belonging, academic success, positive school climate, pro-social peers, required service projects, norms against violence, clear rules, and support from adults other than parents (Risk & Protective Factors, 2017). The same study lists community level protective factors including norms for caring, church attendance, ethnic pride, neighbors taking responsibility for other children, access to support services and community networks, and norms against violence. Interacting with a prosocial peer group, characterized partly by low crime rates and low truancy, also increases resilience (Bushway, Krohn, Lizotte, Phillips, & Schmidt, 2013). School counselors can be trained to coach at-risk students in resiliency (Williams, Steen, Albert, Dely, Jacobs, Nagel & Irick, 2015). Socio-emotional training targeting at-risk students in Portugal reduced the rate of repeating a grade by 10% (Martins, 2010). These learned skills can be developed and improved, skills needed for life, not just school. Jimerson, et al. (2002) concluded that a focus on the socio-emotional development of the student at every grade level is needed to promote academic success.

In a qualitative study, Williams and Portman (2014) used an open coding theme analysis of interviews with eight successful African-American students from financially challenged families and revealed six themes supporting at-risk student success. First, there needs to be collaboration between students, parents and the community. Second, students can take personal initiative to maintain focus, motivation, and to exert effort. A growth mindset may aid success by creating or increasing hope that the goals are achievable with time and effort. Third, parents can encourage and support the students’ academic efforts. Fourth, school and community resources
can be investigated and accessed. Fifth, school counselors can act as change agents. They can connect students with available resources and advocate for students. Sixth, communities can provide a safe, low-crime environment. Afterschool programs can reduce student exposure to danger. Finally, tutoring programs can support academics.

**Religious Supports**

A report commissioned by the Bill and Melinda Gates Foundation proposed enlisting the help of faith-based communities to address the education gap (Moore, Bridgeland & DiIulio, 2010). Research has suggested that many religious beliefs can foster self-control and discipline (Gomes, de Andrade, Izbicki, Almeida & de Oliveira, 2013), and scholars such as Donahue and Benson (1995) two decades before advocated utilizing religious organizations as resources.

These studies looked mainly at the community and structural supports those groups offer. In a study of Latino students, Martinez (2014) found that those who succeeded in high school and planned to go to college had a growth mindset, were resilient, respectful, valued education and religion, and saw themselves as loyal hard workers (p. 119). A majority of the participants in the study mentioned that attending church and their belief in God were sources of guidance to overcome challenges. Smith (2003) offered an analysis of the positive effects of religion on youth found in numerous studies. He listed nine factors: moral directives, spiritual experiences, role models, community and leadership skills, coping skills, cultural capital, social capital, network closure, and extra-community links; he grouped these into three categories: moral directives, learned competencies, and positive role models. Smith (2003) acknowledged that many of the positive factors associated with religion were not necessarily part of the religion itself but could exist in any cohesive positive social group. He found that corporate religious activates were more influential than private beliefs and qualified these findings as being typical
in the United States; additionally, he reported that there are exceptions, and not all religions or religious teachings have positive effects (Smith, 2003). Seligman (2012) has done research at the University of Pennsylvania that found religion is correlated positively with wellbeing, which in turn is correlated with academic success.

**Religion in public school and the law.** Anderson (2004, pp. 34-36) argued that while teachers should not promote religion, they should also not discourage religious belief. Anderson (2004) claimed that students should never be discouraged or forbidden to integrate their worldviews, including religious ones, with assignments and class work in general. He asserted that to do so is poor pedagogy and violates the first amendment and free exercise of religion clauses by promoting one metaphysical worldview (secular humanism or naturalism) to the exclusion of all others. Telling students to refrain from integrating their relevant core beliefs with the subject matter imposes naturalism by default and implies that a spiritual or religious perspective is invalid, and God is irrelevant (Anderson, 2004). This can cause the student to feel disconnected and aliened from school.

**Support for First-Generation Students.** Many if not most HSNC who attend college would be the first-generation in their family to attend and/or compete secondary education. First-generation students earned higher grades and were more likely to stay in college if they felt they participated in community service, held a leadership role, had long-term goals, had a support person, followed positive role models, and had an accurate perception of their abilities (Ting, 2003). Ting (2003) wrote that community service helps the student create a sense of belonging. First-generation students in general had less social support and found adjusting to college more challenging than students with college educated parents who acted as their role models (Ting, 2003). According to Englie and Tinto (2008), first-generation students are more likely to come
from a low-income family, and they may work part time and have less time for campus activities outside of classes. Sufficient financial aid and support increase the likelihood that first-generation students will continue their schooling.

Covarrubias, Gallimore and Okagaki, L. (2016) studied a group of borderline students who were admitted to college to increase the diversity of the student body. If stricter academic standards, in this case, had been used for admission, these students would not have been admitted. As the study revealed, they went through a structured bridge program that helped prepare them for college life; subsequently, they were more successful academically than a matched group of students with similar backgrounds and academic records (Covarrubias et al., 2016). Connection and relationship were recurring themes.

Dennis, Phinney and Chuateco (2005) found that for Latino students’, success was more related to personal motivation and goals than peer or parental support. Motivation includes persisting because students believe they can reach their goal if they continue to strive. In this context, individual young male students can be empowered to harness the power of their will and can be coached to make good choices (Deci & Ryan, 2000, p. 227). Intrinsic motivation is superior to extrinsic motivators (Ryan & Deci, 2000). If a student has a victim mentality, psychological therapy can help him become aware of it and to address it by taking more responsibility (Kets de Vries, 2012). This can be done at the same time as structural barriers are being challenged, especially for first-generation and students of color, rather than waiting for major structural change before doing anything. Moreno and Gaytán (2013) found that culturally competent teachers are better able to relate to students of color and can help them negotiate the hidden curriculum of white middle-class social norms and rules common to most schools.
**Building community.** Engle and Tinto (2008) suggested close monitoring of students and providing structure during the first year of college. Professors can design learning activities that promote community in the classroom since many students cannot stay on campus and commute. Engle and Tinto (2008) make a number of other suggestions including fostering a feeling of belonging to promote engagement and retention, organizing peer tutoring and study groups, and having school leadership focus programs and resources on the retention of students. Counselors should look at the whole student, not just academics in school but aspects that extend to personal life issues that can interfere with school (Engle & Tinto, 2008).

**State and Federal Supports**

Both societal and personal causes of HSNC can be addressed systemically. Mobile Alabama schools, for example, used research based interventions such as concentrating on ninth grade attendance, behavior, and finding alternatives to out of school suspension (Newell & Akers, 2010). In-school suspension, alternatively, allows the student to keep up with class assignments.

Year Up is an intensive one-year training in high demand skills as well as socio-emotional skills, including six months of classroom work followed by a six month internship, for 18-24 year-old urban youth (Closing the opportunity divide, retrieved September 08, 2017; Fein, 2016). Other college preparation books mention soft skills (Downing, 2017). However, there was no mention of growth mindset or clearly presented growth mindset principles in the materials this author reviewed.

The U.S. Departments of Labor, Human Health, and Services, and Education are working together to implement the Workforce Innovation and Opportunity Act (WIOA). This legislation, passed in 2014, was designed to improve the workforce by providing skill training that aligned
with the needs of local business (Employment and Training Administration, n.d.). Another initiative is the Innovation and Opportunity Network (ION) which supports the WIOA by connecting businesses with educational opportunities that can improve their workforce through technical skill training (U.S. Department of Labor, n.d.).

Furger (2008) offered 10 research-based strategies to reduce the HSNC rate. The strategies included developing relationships with teachers and parents, designing smaller schools, early intervention when students struggle, providing preschool opportunities, adapting school schedules to student needs and curriculum to student interests, and finding financial resources for needy students. All the strategies are top down, leaving the student waiting to be rescued. The article had an illustration which showed a teacher throwing a life-saving ring to a drowning student. Developing relationships is the only strategy which would give the student agency, input, and some level of control; but even this seems dependent upon the teacher initiating contact or at least reciprocating.

**Regional Community College (RCC) support**

RCC, the site of this study, has many programs and supports for its students (Gentile, 2016b; RCC - The Center for Alternative Studies, n.d.) including programs for adult learners; RCC offers the HiSET™ exam which is the new ET offered in Massachusetts as well as a preparation class. In June 2017, 36 students graduated from the HiSET™ program; 12 have enrolled in RCC for the fall of 2017 (President’s weekly message, personal communication, email to staff, July 11, 2017).

RCC provides tutoring and counseling (both academic and psychological). They have a guide for each field of study that tells the student which classes to take and in what order called Guided Pathways. They provide and connect students with scholarships and other financial aid.
Orientation Ambassadors (fellow students) are available to guide new students. This author has attended sessions where teachers are trained to recognize struggling students and to refer them to counseling. RCC also has a disabilities office with the usual supports for students with disabilities such as alternate testing sites and extra time. They also track the First Time Full-Time Degree-Seeking students (FTFTDS). About 65% of RCC students are the first in their family to go to college (Gentile, 2016b).

RCC has a program, called CommUniversity, that eases the transition from high school to college. CommUniversity is a collaboration between RCC and some local high schools. Up to 30 college credits can be earned at no cost to the student before they graduate from high school, reducing the time it takes to earn a degree or certificate at RCC or SSU (Gentile, 2016b). Younger students who had to take remedial math or English, however, were less likely to graduate because adding non-credit remedial classes at the start of a program makes the path to completion longer (Calcagno, Crosta, Bailey and Jenkins, 2007).

On the academic support side, RCC offers second chances, grade forgiveness, tutors, and scholarships in an attempt to save students money by encouraging teachers to use Open Educational Resources (OER). This author reviewed the training materials such as *Soft Skills Solutions* (Cross and Lanaghen (2015) and read guidance on personal organization, prioritizing, and planning skills as well as conflict negotiations and workplace politics. However, there was nothing on growth mindset, Grit, and other personal socio-emotional skills relating to motivation, hope, efficacy, resiliency, and self-regulation. As a last resort for a student who has had a major sickness, injury, death in the family or other traumatic events, RCC allows a once in a lifetime erasure of a semester and the return of any student-funded finances with no incompletes or failing grades on their transcript.
RCC requires Computerized Placement Testing (CTP) of math and English skills for all applicants and offers remedial classes. In those classes, instructors include socio-emotional skill development such as the importance of perseverance, hard work, and a new outlook on life and education. They do not specifically mention growth mindset, brain growth, I.Q., intelligence, getting smarter, or grit; they do, however, address the need for the growth of skills and the reduction of negative self-talk; consistent with growth mindset ideas. However, Bers and Schuetz (2014) reported that the community college completion rates have remained low even after decades of research into interventions. Interviewing RCC students may reveal which RCC student interventions implemented help with student success.

The goal of the RCC HiSET™ training is to help students get a fresh start with a new belief that if they work hard, anything is possible. RCC provides career counseling, scholarships, help with transferring to a four-year college, career readiness counseling, self-assessment tests, and resume writing support. Typically, the promise of future increased income is used as a motivator. The training center is located on the western suburban campus of RCC, not the eastern urban campus which is easier to access by public transport and which is in a more diverse neighborhood. This location might be a geographic barrier to some. The biggest issue the RCC training program has is student follow-through and attendance. Some have jobs and cannot take any time off; others promise to come and seem motivated but never show up for the first class, others come a few times and disappear (personal communication with RCC scheduler). This may be due to transportation related constraints; previously, there were several daily shuttles between campuses but they were discontinued as of Fall 2017 (President’s weekly message, personal communication, email to staff, Aug 21, 2017). RCC is working with Uber to coordinate
subsidized transportation, but it will still have a cost and it involves extra effort and planning, skills HSNCs are lower in.

Financial Supports

GED recipients are more likely to be economically disadvantaged compared to regular high school graduates (Malkus & Sen, 2011). Engle and Tinto (2008) attributed much of the attrition of low-income first-generation students to financial pressures. A typical public high school diploma costs society around $10,000 a year (Vo, 2012) for 13 years (including kindergarten) for a total of about $130,000. Most HSNCs leave during or just before high school; they thus theoretically save their community $40,000 by missing four years of school. However, they cost society an average of $392,000 ($488,000 in 2019 dollars) (Belfield & Levin, 2007). If the HSNC is unemployed much of his life, it seems reasonable to add the cost of up to $130,000 of education to the $488,000 lost taxes and services for a total of almost $600,000 lost to society for each HSNC over his lifetime.

Former President Obama had planned to lower the cost of college (Lewin, 2013, August 22). Making college tuition free, as he was proposing, could help but it does not include room and board and other expenses. It also does not consider lost income if students reduce their hours of work or stop working altogether. If college were free, it could still cost students lost wages. Adding living expenses to free tuition would eliminate the number one reason cited for leaving college.

Free tuition. At present, tuition funds more than state aid does (Vega, 2014) but that aid comes from everyone's taxes whether they went to college or not. If the government has to borrow to cover tuition, then “free tuition” is not free. The student, and his non-college graduate neighbors, will be paying that loan back in higher future taxes. If the money is not borrowed,
then taxpayers, most who have not graduated from college, are paying for someone else’s education. The president of RCC announced further cuts in state aid for 2017-2018 putting even more pressure on student tuition to finance higher education (President’s weekly message, personal communication, email to staff, July 11, 2017). California has had tuition-free state college since the late 1800’s (Vega, 2014) and by law statewide since 1960 (Coons, 1960). Fees have been growing, but California had a higher high school graduation rate in 2015 than all its bordering states (Governing, 2017). New York State in early 2017 announced a free tuition program starting in the fall of 2017 at two and four-year state schools if students agreed to work in the state for a time after they graduate (Kamenetz, 2017, April 11). Since states foot the bill for state schools, the may recoup some of the costs by keeping graduates in state. However, since state taxes vary from zero in seven states to 13% in California (Moreno, retrieved 19, July 19, 2017), they would not all benefit from graduates equally. If education were funded nationally from federal taxes then graduates would be reimbursing society regardless of where they live and work when they pay federal taxes. In addition, since college graduates are more likely to believe that humans are causing Climate Change (Dunlap, 2016, March 28; Saad, 2014). Those graduates may help avert the predicted costs of global warming and produce researchers who may invent new solutions. A National Geographic article estimates those costs to be $2.4 trillion from 2007-2017 due to increased health and natural disaster costs (Leahe, 2017, September 28). Leahe writes that the three hurricanes and seventy-six forest fires in just three months in 2017 cost $300 billion, enough to pay for four years of tuition for the 13.5 students presently enrolled in public colleges.

RCC is piloting a free tuition program for qualified but needy students that would fill the gap between Pell grants and a 15-hour course load. The disadvantage is that the course load may
cut into student employment opportunities and increase financial need to cover childcare. RCC estimates that with a free associates degree, a four-year degree could be earned for about $15,000 in additional tuition for the last two years at a state school (President’s weekly message, personal communication, email to staff, Feb. 28, 2017).

However, Chen (2017, April 11) reasoned that free tuition for traditional students would help only those who go directly from high school to college full time. Chen (2017) concluded that free tuition would benefit middle and high-income students more and that qualified low-income students already have virtually free tuition with Pell grants and other financial aid. Educating parents on the available financial aid might at least keep them from discouraging their children from going to college. Some colleges have cost calculators that estimate the cost of private four-year colleges with financial aid and other sources available (Bui, 2015). This can reduce costs to almost nothing for some students with parents in certain income brackets. Political slogans of free tuition for all might evolve into free tuition for all who need it.

**Conclusion**

Interventions and supports can be systemic and political but also socio-emotional and psychological. RCC has many programs designed to support at-risk students. These range from classes in study skills to counseling, financial aid and grade forgiveness. Other supports available include government programs for financial assistance and community organizations including religious groups that provide social and behavioral guidance and role models. In spite of all these efforts to help the HSNC, these individuals, particularly men, still leave college in high numbers without a degree and have life outcomes that are more similar to other HSNCs and unlike traditional high school graduates. However, if HSNCs complete college, their life outcomes are as bright as any college graduate. Improving socio-emotional skills has been found to be more
important than acquiring academic knowledge alone, for achieving the goal of a diploma and keeping gainful employment after graduation. HSNC males have less self-control and more antisocial behavior; both traits impact academic and employment performance negatively. The high male HSNC rate is a social justice issue that affects poor, urban, and marginalized students more than middle and upper-class students in the suburbs. Hiding the achievement gap with ECs conceals the serious educational issues facing men of color and the decline in the graduation overall (Heckman & LaFontaine, 2008). Continuing to finance failing programs and neglecting socio-emotional skill development will waste the students’ time and money as well as societal resources.

Summary

Male High School Non-completers (HSNC) face a difficult and uncertain future unless they return to get more education. High School Equivalency Tests (ET) such as the GED were designed to give HSNCs second chance and an alternate path to college, the military and other careers. If an HSNC earns a college degree, he will have life prospects equal to any college graduate. However, very few male EC holders graduate with a college degree. This second early departure of the CNC leaves them with life prospects no better than any HSNC who never passed an ET and earned an EC. Unfortunately, when ETs and in-school training were made available to 16 year-olds, the HSNC rate increased. This appears to result in a net loss to society. HSNCs and CNCs have lower incomes and higher rates of divorce, substance abuse, crime, and several other negative outcomes. In addition to those social problems, HSNCs will cost society nearly a half a million dollars each across their lifetimes in lost taxes and increased public assistance.

There are many interventions and supports that are designed to help all students succeed and a number are designed to provide assistance to former HSNCs who are now in college.
These supports include a number of formal and informal protective factors, financial aid, academic support, and some limited socio-emotional coaching. Supportive interpersonal connections and relationships are recurring themes alongside academic interventions that show some promise. However, these interventions have mixed results, and they consume scarce resources without showing the hoped-for outcomes. Most EC holders still fail to finish a two or four-year college degree. The current interventions appear to be failing from a lack of understanding as to what actually causes academic failure for intellectually competent males who leave high school and earn the EC, but then who also leave college before graduating. For most male EC holders, something is missing in the numerous interventions and support programs. These appear to be socio-emotional skills more than academic skills. Providing additional financial and academic support does not seem to be the answer.

This failure of ECs (in complicity with schools that promote them) to improve lives of young males is a social justice issue affecting the poorest and most marginalized in American society. These males come predominantly from less affluent backgrounds. Their plight is being intentionally hidden by counting the EC holders as high school graduates. Additionally, many ECs for men of color are earned during periods of incarceration. This is inadvertently masking the educational gap particularly between students of color and white students. Apart from a few exceptions, the ECs are not improving the lives of the men who earn them.

According to Lott (2012), very little qualitative research has been done with successful male EC holders who become college students that examines which interventions are effective and which are ineffective. Dwyer, Hodson, and McCloud (2013) asserted that more qualitative research is needed to understand the quantitative data trends. Present interventions may still be missing some important factors. Identifying the missing components that help EC recipients
succeed in college and achieving a deeper understanding of factors already identified are the goals of this study. As an IPA study, the primary focus is to understand what these exceptional male EC-holding participants themselves perceive as contributing to their success. An ancillary benefit from this study may be to reveal new directions for future study, especially as the data are filtered through the relatively new Growth Mindset theoretical framework lens.
Chapter Three: Research Design

The goal of this research study is to gain a better understanding of the perceptions of successful male community college students who had previously failed to graduate from high school and found alternative means to receive that credential. The vast majority of male high school non-completers (HSNCs) never earn a high school or college degree. This large population becomes an economic and social drain on society, costing fellow citizens an average of around $500,000 per HSNC in lost taxes and increased social services and crime. This study explores the factors that HSNCs who are succeeding in college perceive have led to their success.

This chapter will explain the research design beginning with the research question followed by a discussion of qualitative research. Explanations of the constructivist-interpretivist paradigm and the Interpretive Phenomenological Analysis (IPA) approach used in this study will follow. Finally, specific details on how the study will be conducted and the approach to data processing and analysis are outlined, and measures to assure trustworthiness are discussed.

**The Research Question.** The research question guiding this study is:

How do male community college students who failed to graduate from high school make sense of their collegiate academic success?

**Qualitative Research Approach**

Qualitative research has gained respect from the scientific community for the rich and thick descriptions it can construct of human experience. While quantitative methods have an important place in the world of research, human thought and behavior are difficult to reduce to quantifiable survey questions or controlled experiments. The human element makes problems in education more complex, involving multiple individuals and interacting variables. After a
quantitative survey, the researchers are left wondering why the participants answered the way they did. Qualitative research interviews pursue a deeper understanding of why participants answered as they did. IPA studies fall within the qualitative, constructivist-interpretivist paradigm (Ponterotto, 2005) as opposed to a positivist or post-positivist paradigm.

**Constructivism-Interpretivism**

Ponterotto (2005) explained that naïve positivism assumes that we can know an external reality as it. For a positivist, there is one truth. Positivism and post-positivism are more commonly used for quantitative studies in the hard sciences. In contrast, constructivism holds that the only knowable reality is what is constructed inside our heads. There are many truths or equally valid perspectives. Understanding within this paradigm is constructed in the mind of the observer and does not claim to correspond to reality as truth in a positivist sense. The constructivist-interpretivist perspective on knowledge is better suited for a qualitative study of the complicated unique thoughts and behaviors of human subjects. The researcher strives to construct an approximation or interpretation of the participant’s understanding and meaning that can be communicated and understood sufficiently to be useful to others.

Forrester (2010, p. 30) discussed critical realism, that it is more positivistic than extreme relativism which sees little correspondence between our constructed understanding and the real world. It is less naively positivistic than extreme realism but does acknowledge that there is a connection to the external world. In this context, the qualitative research paradigm holds that human knowledge and the exploration of it through research is an approximation, a constructed interpretation.

**Intersubjectivity.** Humans share the meaning of language and concepts. Husserl called this intersubjectivity (Christian, 2016). The participant’s constructed reality is a reality *out there*
from the perspective of the researcher, but it is interpreted from the perspective of the researcher. The researcher is not inventing meaning from his imagination, but from interacting with a reality outside of himself.

**Interpretive and descriptive phenomenology.** According to Lopez and Willis (2004), Husserl, the father of phenomenology, championed descriptive phenomenology, but one of his students, Heidegger, deviated from his mentor by favoring an interpretive approach. Descriptive (eidetic) phenomenology looks beyond or beneath the particulars of a phenomenon to its essence which may involve a shared universal trait that can be generalized to other people in different times and places. Descriptive phenomenology focuses on understanding the experience itself; therefore, the researcher attempts to bracket or suspend all prior personal knowledge and bias (Lopez & Willis, 2004).

Interpretive (hermeneutic) phenomenology is focused on the participant’s understanding or interpretation of the phenomenon or experience. Unlike his mentor, Heidegger, one of the foundational interpretivist thinkers, asserted that it was impossible to escape one’s presuppositions and to transcend the human condition to observe a phenomenon from an objective point; furthermore, every experience is interpreted through these presuppositions. The observed and the observer both have their presuppositions and interpretations; these interact and create a double hermeneutic (Smith, 1996) that is essential to the research process of IPA.

**Presuppositions and paradigms.** Everyone holds or believes certain worldviews and paradigms about reality and life. Khun (2012), in his book *Scientific Revolutions*, described paradigms as the scientific consensus of how to look at the world. According to Heidegger (1927/1962) no interpretation is presuppositionless (p. 191). Rarely are individuals without some philosophic training, aware of their paradigms or presuppositions. In this context, the meaning
and significance of experiences can vary enormously from person to person and time to time as they are filtered through different personal perspectives or lenses and different presuppositions.

**Reality is obdurate.** Constructivism is not total subjectivity; the researcher is not living in a vacuum and dreaming up ideas out of thin air. Nature or reality is *obdurate* (Blumer, 2001). Blumer (2001) asserted that the real world would not change or bend to fit our constructions of it. That is evidence of its existence apart from our perceptions of it. Reality has a way of disrupting and invalidating our hypotheses of life. In the research context, constructions need to fit the interview data, not the other way around.

**Interpretative Phenomenological Analysis (IPA)**

This study utilizes a constructivist-interpretivist strategy of inquiry called Interpretative Phenomenological Analysis (IPA) (Smith, Flowers & Larkin, 2009; Smith, 1996). The researcher seeks to understand the way another person experiences and makes meaning of their life, their world. The researcher is trying to understand how the participant interprets his experience (Smith, 1996, p.3). IPA research is not attempting to describe the participant’s actual experiences, even though some description may give the reader context. IPA strives to understand the participant’s interpretation, understanding, or perception of her experiences (Connelly, 2010; Fischer, 2010; Matua & Van Der Wal, 2015).

In an IPA study, the dynamic of the double hermeneutic is observed, and it involves two levels of epistemological constructivism (Smith, 1996). First, the participant has constructed a meaning or reality, which is an interpretation of his experiences. She then attempts to communicate to the researcher. The researcher, meanwhile, is constantly constructing an understanding of the participant’s articulated meaning. This is a double hermeneutic. The goal in the interview exchange and subsequent data analysis is for the researcher to construct mental
models of the reality inside of the mind of the participant that are sufficiently accurate approximations to be useful for communication and action.

Close Enough?

IPA is well suited for this study. In an IPA study, the researcher is asking the participants to look at their perceptions. Their perceptions may or may not be accurate in a positivist sense, but motivation and action are often based more on perceptions than reality. What the student thinks is true has a direct impact on his confidence, motivation, and optimism (Gagné & Deci, 2005). Their interpretation of their experience is what motivates their actions. Thus the
interpretation is of equal or sometimes more interest and is more important than the experience itself (Lopez & Willis, 2004).

**The researcher interprets the participant’s world as an outsider.** IPA is a way of knowing based on collecting data by recording the explanations the participant gives of their experience and the meaning they attach to it. The researchers (consciously or not) will interpret these explanations through their paradigms and biases and construct an understanding that fits the participants' explanations as well as the researcher's. With the use of feedback such as member checking and questions during the interview the researcher strives to construct an interpretation that is as close to the participant’s interpretation as possible, knowing it will never correspond 100%.

**IPA is ideographic.** The goal of this IPA study is to gain an understanding (interpretation) of the participants’ understanding (interpretation) of what has led to their academic success. This in-depth analysis of individuals, their perspectives, and their contexts is what Smith, Flowers & Larkin (2009) call *ideographic*, meaning the researcher is studying an individual or a small number of individuals and their particular experiences. IPA interprets the participant’s personal interpretation of her experiences. The researcher does not just describe the participant’s thinking but is an active constructor of her meaning, letting the data speak and inspire, to gain new and richer understanding nested in a social and cultural context (Wagstaff et al., 2014).

The researcher may start to compare the understanding of different participants and construct generalizations about the group that may inform future questions and theme construction. However, constructing accurate generalizations about all male HSNCs is not the
primary goal of this IPA study. The primary goal is to construct a fresh, insightful, and informed understanding of the individual participant’s understandings (Smith, 1996, p.3).

**IPA looks at webs of meaning based on personal experience.** Smith (1996) defines an experience as the smallest spark of awareness of some feeling or sensory input. Experience of connection between the smallest units of experience is also an experience. He defines an experience as an awareness of anything, whether it is a pinprick or a sound or even a feeling of fear, pain or pleasure that exists only in the mind. Experiences are hierarchical (Smith, 1996). The smallest sensory experience is then tied to others in larger and more inclusive complexes or webs of meaning. An IPA study is looking for these broader webs of meaning.

This study focuses on what the participants believed helped them succeed in college. There are systemic supports and cultural capital impacting success that the participant is unaware of, but an IPA study is focused on the perceptions of the participant, not necessarily her actual experiences or precise details about the environment she lives in.

**IPA will guide questions.** IPA will guide the formation of open-ended questions that encourage the participant to open up and share his perceptions with as little external direction from the researcher as possible, in the initial stages. An inductive IPA study looks at the data and draws out themes instead of imposing theories on the data (Thomas, 2006). The follow-up questions will focus on the perceptions of the participants and seek further elaboration and clarification, attempting to not guide their thinking in a certain direction, either toward or away from a theory known to the researcher. Smith, Flowers and Larkin (2009) asserted that IPA analysis does not prohibit the use of themes that happen fit known theories – if they fit the data naturally and are generated inductively. To intentionally avoid questions that may reveal thinking that aligns with a motivational or educational theory is also a bias. Letting the text speak
means the research should not ignore emerging themes just because they fit known theories. This would include Mindset theory (MT) which serves as the theoretical framework for this study.

**Bracketing.** The descriptive researcher strives to bracket personal presuppositions and theories and focus on the essence of an experience that a group of people might share (Lopez & Willis, 2004). A reflective researcher attempts to be mindful of her beliefs and biases to bracket them (Moustakas, 1994). Bracketing is the intellectual task of holding one’s beliefs and biases in a suspended state in the attempt to be objective or neutral. This is an admirable task, but according to Gearing (2004), and Heidegger (1927/1962), bracketing was ultimately impossible and even undesirable. Heidegger deemed it impossible for a researcher to fully bracket her entire life experience and rise transcendentally to a completely objective and neutral perspective (Gearing, 2004). Individuals can never fully escape their own culture and context. Achieving total objectivity or complete bracketing also seems impossible because some biases are subconscious, and one cannot bracket what is not consciously thought. Identifying research-distorting biases is one of the key roles of peer review, which in the case of this study will take the form of the dissertation committee members.

Instead of attempting to achieve perfect transcendent objectivity and neutrality, the researcher will be consciously restraining his theoretical preferences, especially during the initial analysis phases. The researcher will reveal his positionality and allow the readers to make their conclusions as to how biases influenced the research and conclusions. The research design needs built-in checks and balances to challenge pet theories. In the design of the interview questions for this study, this researcher acknowledges the guiding influence of MT and will formulate some questions that could rule out this framework as an explanation for the success of the men. Transparency and humility on the part of the researcher give the reader and other researchers
greater confidence in the research. This shows respect for the readers as capable thinkers; able to come to their own conclusions. It seems more authentic for the researcher to be transparent and reveal positionality, which includes some theories, while attempting to bracket his biases than to naively claim compete neutrality. (see Appendix C for a list of theories familiar to the researcher).

Participants

The participants are male community college students under 30 years of age who attended American schools from at least the seventh grade on. They did not complete high school but subsequently decided to take a high school equivalency test (ET), earn a high school equivalency certificate (EC) and enroll in college. Successful students will be defined as earning a minimum of C which is a 2.0 grade-point average. A grade of C or better is a sign of success because other state schools will usually accept those course credits. They must have completed at least a semester, preferably, working towards completing a year or more of a degree program while taking 12 or more credit hours a semester. Since the largest group of HSNCs to leave college do so during or after the first semester and never start a second (Crosta, 2013), then those who continue are experiencing success and are more likely to stay in school. The 12 credit threshold eliminates part-time students whose progress is difficult to assess. Passing an ET will filter out most students with learning disabilities, which can be a cause of non-completion of high school or college. The goal to recruit students under 30 years old since older students, and those who did their secondary schooling outside the United States, tend to approach school with more focus and experience more success. The younger HSNC males have higher rates of college non-completion (Heckman, Humphries & Kautz 2014; Gentile, 2016a, pp.7-8).
IPA studies look at a homogenous group (Wagstaff et al., 2014). The target group for this study is all male, all HSNCs and, all under the age of 30 who are succeeding or who have succeeded in college. Within that group, there may be a diversity of ethnicities. Students of color are of special interest because of their higher HSNC rates and larger achievement gaps. The participants will be asked to self-identify their ethnicity during the interview process.

IPA is well suited to explore issues of socio-emotional skill, mindset and individual self-determination. IPA will free this researcher to listen to the student’s point of view and to avoid imposing a political or philosophical perspective on the study. The students may be imposing theoretical and philosophical paradigms on their situations, whether they are aware of them or not, but that is his prerogative in an IPA study.

**Number of participants.** Tension exists between using a large or a small number of participants in an IPA study. Holland and Peterson (2014) gleaned a great deal of data from only four participants. Wagstaff, et al. (2014) observed that higher numbers might inadvertently push the coder to choose themes that apply to most or all of the participants, thus overlooking some possibly important individual differences. Twelve participants or more can create an enormous volume of data if each individual is interviewed for an hour each and themes are member checked. IPA studies are not generalizing, but rather attempting to gain a deeper, richer understanding of the individual’s interpretation of the phenomenon. This study will seek to involve 6 -12 participants which will produce substantial amounts of data even if there is some attrition. If the researcher recruits more than 12, greater ethnic diversity will be possible. If a sufficient number of men cannot be found, the course load criteria could be reduced from 12 to 9 hours a semester and the age to 40.
**Recruiting participants.** The researcher will use HiSET and RCC records to identify students who entered this institution with an equivalency certificate (EC). The first graduates from RCC’s HiSET program started coursework in the fall of 2016, several may be completing their 4th semester soon. The first contact with prospective participants will be through an RCC email. The researcher will offer to pay for lunch on campus. The venue must provide confidentiality and be quiet enough to record the interview, such as an unused classroom or a quiet corner of the cafeteria. Phone or Skype interviews are options. They can be recorded if a speaker phone or Google Voice are utilized. A $20 gift card may be provided as an incentive if potential participants feel reluctant to give of their time. Many community college students are already balancing work and school.

**Participants in this Study**

The IRB process started in mid-April was approved at the end of May at NEU. Then I was permitted to start the IRB process at the target institution and received approval at the end of June which was too late to post notices for one of the summer sessions. In addition, although the school has a large minority representation, the location that had the most ethnic diversity and potentially the most participants only allowed posting in one visible spot in the hallways, the other poster was in the vet office where it was not very visible. Thus no inferences should be drawn from the fact that all my participants are Caucasian. It was disappointing that the restrictive posting and email policy limited the chance of finding participants of color. This study is not quantitative but I was hoping for a wider spectrum of experience in my participants.

Seven men responded to the call for participation in the study but one backed out after I emailed him the consent form. I do not know why he backed out. I am a mandatory reporter of child abuse and reporting criminal activity was included by the IRB at Northeastern. There was
an eighth young man referred by his mother who was a longtime friend but lived in another part of the country so I never met the young man but had seen pictures. He would have been the only person of color in the study so I was disappointed not to hear his story. He had succeeded for a couple of semesters but left college without a degree. He would have been the least successful and his story would have been interesting but the focus of this study is on success for this rare type of student. He never returned my emails.

The interviews were all done by phone and recorded with the participant’s permission. Phone interviews were more convenient since we could talk at any hour of the day or night and I was able to conduct at least one interview from 1,000 miles away. Jake reflected that He says this interview covered more than his 4 internship interviews for medicine.

**Procedures**

Upon acceptance of this proposal, the researcher will contact the Institutional Review Boards (IRBs) of both Northeastern University and Rural Community College (RCC) for approval. When approval is given from both schools, the researcher will contact the records office of RCC and the HiSET program for names and contact information of potential participants. A snowball method will also be used – asking students if they know of anyone who might fit the profile of this study. With IRB approval former students could be asked for contacts. Emails will be sent to potential participants explaining the purpose of the research study, the conditions of confidentiality and participation, and the estimated time commitments as well as the food or gift card incentives. The interview request will be for one-hour. If there are not enough respondents after a week, follow emails or phone calls will be sent/made to the original pool of potential participants contacted.
Data Collection

Qualitative Interview: Responsive Interviewing Model

Rubin and Rubin (2012) described the "responsive interviewing model" in four steps. First, a responsive interview looks for context and detail, understanding that life is complex and difficult to understand. Second, the interview is an interaction between two people whose personalities impact the exchange. Interviewers need to understand what they bring to the process and try to be as neutral and non-judgmental as possible when the participant reveals disturbing material. Third, the interview is done in the context of a relationship between interviewee and researcher. The interviewees (participants) are partners who are giving time and energy to the research process and who establish rapport. Finally, responsive interview designs are flexible. The interview form adapts to the needs of the participants and the data. It starts with some structure but the questioning and data analysis may go in a different direction depending on what the participants reveal (Rubin & Rubin, 2012, p. 36). The interview questions are designed to be open ended to elicit stories rather than one-word answers. There will be a list of follow-up questions available, printed out for reference, and a pen and pad to jot down annotations and ideas for new questions during the interview. This appears similar to what is called a semi-structured interview (Smith, Flowers & Larkin, 2009; Shaw, 2010). Ponterotto (2005) referred to this as consensual qualitative research (CQR) which uses open ended questions. All three methods are flexible, adaptable, and appropriate for an IPA study.

Data Collection Overview

After asking for permission to record the interview the research will start with a few background questions such as their age, ethnicity, when they left high school, their career goals and where they are in their program. The researcher will use semi-structured open-ended questions
to conduct the interview. The initial research question is designed to discover what the participant understands to be the secret to his success, for example:

- Why do you think you are succeeding in college? or
- Why is college going so well for you? or
- Tell me about your experience as a college student.

The initial interview question is designed to elicit a longer answer without leading the participant in a particular direction. The researcher will be prepared to choose from a variety of follow-up questions depending on the direction of the participant’s responses take (Rubin & Rubin, 2012). The very act of interviewing may alter the participant's perceptions of his experience. Intermittently asking the participant if he has changed his understanding or if he thought the same way before the interview may reveal a transformation in his thinking during the interview. Any altered participant understanding will be included in the data.

The one-hour interviews will be recorded and transcribed. Pseudonyms will replace actual names in the transcript, and changes in other identifying information will be made. The list of pseudonyms will be kept in a password-protected file separate from the transcript. After the interviews are transcribed, the researcher will give participants the opportunity to member check the transcript. A copy of the transcript will be offered and participants should get back to the researcher within a week with any changes or additions. There may inaudible sections of the recording that need clarification. New topics and questions may also emerge in later interviews that may need to be explored with the earlier participants.

**Participant interviewer matching.** Richie (2003) discussed the advantages and disadvantages of matching the participant with the interviewer. Close matching may make the participant more comfortable but may also cause them to assume the interviewee knows what
they mean and vise a versa. The researcher will conduct the interviews, and he is a male, so he will be matched in gender but not age or educational attainment. It might be helpful to make some connections over recent sporting events or other activities to build rapport and overcome any divides that educational and age differences might impose.

**Data Analysis Steps of IPA**

**The analysis stage.** While IPA strives to be inductive, it is impossible to be purely inductive, or deductive. Thus a continuum of *more* inductive to *more* deductive is appropriate (Newman, 1998). This study will seek to be more inductive. IPA strives to let the data speak, using the participants’ words and concepts as much as possible when creating themes (Smith, Flowers & Larkin, 2009). However, the more educated or sophisticated the participant, the more likely he will express theories he is aware of such as, in the case of this study, self-esteem, racism, or grit. Even the less educated participant is subject to theories common in his culture which have influenced his thinking, consciously or subconsciously. It seems impossible for the researcher or the participant to bracket out all preconceived ideas and theories. Thus there is a place for theory-driven or hypothesis-driven questions as long as they are balanced and the analysis attempts to bracket those theories and proceed inductively (Smith, Flowers & Larkin, 2009).

**Six Steps of Data Analysis**

Smith, Flowers and Larkin (2009) outline six steps of data analysis for an IPA study.

- Step one: read and re-read the transcript, listen and re-listen to the audio
- Step two: Initial noting and commenting line by line of the transcript
- Step three: develop emergent themes that combine comments or noting from step two
- Step four: Searching for connections across themes
- Step five: Repeat the first four steps with each participant’s interview transcript
• Step six: Finding patterns common to all the participants

**Step one.** Smith, Flowers and Larkin (2009) advised the researcher to: read and re-read the transcript, listen and re-listen to the audio, become very familiar with the data, be immersed in the transcript, and read it slowly absorbing the details. Listening to the audio adds non-verbal elements to the transcript: pauses, tone, and emotion. Listening can also remind the researcher of thoughts and impressions she had or the participants expressed nonverbally but which were not written down at the time. These can be noted in the in a separate file or notebook, as an addendum to the notes taken during the interview, but specifying that they were made during a subsequent time while re-listening to the interview, not during. The entire analysis process needs to be described and written down – in other words, an audit trail kept – so other researchers and readers of the study can clearly see each step of the analysis. IPA is ideographic in the focus on the individual but also in the unique analysis of each researcher. No two researchers would produce identical analyses of the same interview when following the same basic procedure, however keeping a trail is important for trustworthiness. The researcher’s interpretations then become part of the process.

**Step two.** Smith, Flowers and Larkin (2009) explained step two as exploratory commenting. They suggested making three columns on a page with the transcript in the center and the initial comments in the right-hand column. This researcher prefers to put the transcript in the left-hand column, comments in the center, and then emerging themes that begin to organize the initial comments in the right hand column, so the reader can see flow from the comments that inspired them. Comments will pertain to the actual thoughts expressed by the participant in their words as much as possible, noting anything of interest. The researcher, during this stage, will take time to interact with the text and become very familiar with it, noting what seems to be important to the participant such as people, relationships, events, values, dreams and goals. She will also focus on
the phenomenon described that the participant perceives contributed to his success. Linguistic and conceptual comments are also acceptable at this level of analysis. It is possible that these comments might exceed the transcript in volume, and the researcher should expect this process to be time consuming and fairly unstructured to let the text speak and direct the analysis (Smith, Flowers & Larkin, 2009).

Smith, Flowers and Larkin (2009) asserted that during this stage, the researcher must allow or acknowledge the inevitable: during the data collection and analysis process, the researcher may bring in previous understandings and experiences that relate to the data (pg. 89). This occurs when the researcher’s self-awareness of preconceived ideas, favorite theories and possible biases are used to better understand the transcript. Smith, Flowers and Larkin (2009) cautioned, that if the researcher finds the process becoming more about the researcher than the participant, she should stop and step away from the task for a while. Researcher questions about the text of the interview are also a part of the initial comments. This stage may involve the researcher using logic to probe the content, and to look for the participant’s reasoning, logic or inconstancies.

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**Step three. Look for emergent themes.** This step focuses on the researcher’s exploratory comments which is the “I” in IPA: interpretation. Emergent themes should be based on the text to discover patterns and connections between the parts of the interview and the whole. The emerging themes are short, pithy statements or phrases that capture the essence of threads of meaning to connect formerly disparate parts of the data, creating conceptual connections between the parts (Smith, Flowers & Larkin, 2009). Saldana (2013, p. 91) described this as In Vivo Coding, inductive
coding, or verbatim coding. The researcher uses the words of the participants to describe coding categories. As the transcript is read, the researcher notes words and terms that capture the essence of the response such as "confident" or "difficult, being aware of the participant repeatedly returning to familiar perceptions and explanations. There is the very real possibility that the interview process itself will alter the perceptions of the participant, and he will develop his own hypotheses. The data does not organize itself, but is filtered through the researcher’s intellect and biases.

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There may be 10, 20 or more initial themes organized chronologically or alphabetically with supporting line numbers and occasional quotes to illustrate the theme (Saldana, 2013 p. 96). There will be residual text, and the researcher will place an asterisk at the beginning of any line of the transcript containing data that does not fit under those initial codes. She will then look for novel themes to emerge that organize the residual, disparate data.

At this point, the researcher organizes initial themes using a reverse outline or by printing out the list, cutting the paper so each theme and its textual support are on a separate piece. The themes can then be clustered under super-ordinate themes (Saldana, 2013 p. 99). This is also called nested coding or hierarchical coding (Rubin & Rubin, 2012, p. 200; Saldana, 2013, p. 77-79). The researcher will start with primary codes or “children” and then group them under more general codes or “parents.” The data is then organized into an outline form with subthemes indented under the major themes; it includes line numbers from the transcripts and some quotes.

**The accordion coding process.** Wagstaff et al. (2014) observed that the coding process resembled an accordion with codes increasing in number like an expanding accordion until the
coder notices comprehensive themes that unite the existing codes under a few broader themes, and the coding accordion is pushed together. Bracketing will be the challenge; trying not to force the participants’ understandings into a theoretical framework, but rather to let the data speak. There may be a new theme, hypothesis or theory that has not yet been constructed that better unifies the data that emerges.

**Step five.** Repeat steps one through four for data from each participant. At this stage the researcher can reflect on her experience as she interprets the text (Smith, Flowers & Larkin, 2009, p.100).

**Step six.** The researcher looks for patterns across the super-ordinate themes of all the participants, comparing, contrasting, renaming, and reorganizing themes (Smith, Flowers & Larkin, 2009, p. 101). Smith, Flowers and Larkin (2009) recommended bringing in theoretically-based categories during this step. Humans are hypothesis makers and testers (Hammersley, 1992, as cited in Saldaña, 2013, p. 147). MT concepts such as getting smarter or more persistent may begin to emerge as super-ordinate themes. The researcher must reflect on all the codes to see if they can be subsumed naturally under broader growth mindset or other themes, and MT offers a new lens through which to examine and organize the data.

The researcher must consciously consider that themes and patterns which appear to be coming from the data may in fact be coming, not from the text, but from the researcher’s knowledge and experience. It is important in self-checking for bias and in attempting to bracket one’s experience to search for disconfirming evidence, especially for the MT themes. As the guiding theoretical framework for this study, it has inexorably altered this researcher’s thinking, in ways he may not be aware of and thus cannot bracket.
The contribution of MT to this study is not just in developing interview questions but also informing theme creation in the later stages of analysis. MT has only recently become an educational trend as teachers attempt to integrate it into their classrooms. It is possible that participants might have been exposed to it in secondary school, or introduced to it in a HiSET training or another class at RCC. It is likely that most HSNCs have more of a fixed than a growth mindset (Dweck, 2006). However, if they are succeeding in college, their mindsets may have evolved from fixed to growth.

Potential Research Bias and Design Flaws

Ponterotto (2005) cautioned against post-positivizing the interview process. He warned against having a standardized set of questions for all participants. Interview questions should not guide the participant to the preconceived hypothesis of the researcher. Categories for interpreting the interview data should not be formulated before the interviews. Ponterotto (2005) also noted that many psychologists have been trained in post-positivist survey methods, and he expressed concern that researchers will turn a semi-structured qualitative interview into a quantitative survey by standardizing questions.

However, it is impossible to approach an interview or a coding session without presuppositions (Heidegger, 1927/1962). The best a researcher can do is to be aware of biases and acknowledge them. Standardized initial questions, thoughtfully developed, are better than random, wholly improvised queries which are not necessarily unbiased and objective, but also guided by previous knowledge. This researcher will create a set of well-designed follow-up interview questions to choose from, or she will create novel questions during the interview as new areas of interest come up. (See Appendix D for a list of follow-up questions.) The semi-structured interview process should allow for individualization for each participant. The
interview process may inspire new questions that the researcher would like to use with all the participants.

Ponterotto (2005) continued to warn against using preconceived theme categories. However, according to Lopez and Willis (2004), Heidegger would counter by pointing out that the researcher is not a blank slate, she exists in a cultural, historical, and intellectual context. Heidegger (1927/1962) was cognizant that the researcher exists and thinks in a context, a worldview which he calls being-in-the-world (p. 107). The researcher has theories in mind that grow out of the literature, his experience, his worldview, and his education. Heidegger calls these fore-conceptions and then immediately declares that no interpretation is presuppositionless (p. 191). Smith, Flowers and Larkin (2009) took a slightly different angle on this concept by saying that focusing first on the text may guide the researcher to the preexisting theory or presupposition that best fits the data (p. 25). The researcher does not become more objective by not revealing her potential theory-driven themes or pretending she does not have any, for they are still in her conscious and subconscious thoughts. The researcher achieves greater objectivity by acknowledging his favored theory-inspired themes and then testing competing themes, in addition to counterbalancing her preferred preconceived themes. The more widely read, self-aware and philosophically astute the researcher is, the less likely she is to settle on one simplistic theoretical explanation or category of themes.

This study employs MT to guide not only the formation of interview questions, but also the creation of themes that emerge from the data, but it is only one tool for analysis. An IPA study is not to be used to test theories, but theories can be used if they fit the data organically. Every researcher has a lens; the key is to know what it is, be aware of its strengths, and develop alternate and competing themes to challenge it.
Examples of MT questions
- Describe what you feel about your academic ability/IQ?
- How do you feel your intelligence fits college demands?
- In what ways have your abilities changed allowing you to succeed in college?
- Do you feel you are getting smarter?

Two broad MT-based themes
- Fixed mindset thinking
- Growth mindset thinking

Confirmation bias. Robrecht (1995, as cited in Heath & Cowley, 2004) cautioned the researcher to avoid looking for data to confirm theories rather than looking at the data and allowing the participant's words to guide the emergence of themes. Utilizing the vocabulary of the participant to create themes is one way to reduce the tendency to look for confirming data. Creating competing or contradicting themes is another way to control for bias. A novice qualitative researcher needs to be continually checking her desire to validate (or invalidate) a theory. A researcher can only avoid the tendency towards confirmation bias if she is aware of her biases and favorite theories and deliberately looks for challenging or disconfirming data. During the final step of the analysis, this researcher will experiment with possible MT themes but will also consider alternate organizing categories from other theories. This researcher will need to guard against forcing the data to fit MT themes.

Criteria for Quality Qualitative Research

Reliability and validity. This is a developing area in quantitative research but some consensus is appearing. Smith et al., (2009) relies heavily on Lucy Yardley (2000) in their chapter on validity (p. 179) and she is cited by over 1,500 other writers according to Google...
Yardley discusses four traits of quality qualitative research. They are: sensitivity to context, commitment and rigor, transparency and coherence, and fourthly, impact and importance. These four traits can be subsumed under and expanded upon in a more recent work by Tracy (2010), though Tracy does not reference Yardley yet arrives at similar qualities of good qualitative research. Tracy listed eight traits of good qualitative research: (a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility and trustworthiness, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence. Tracy is cited by over 2,000 authors according to Google Scholar (2018). Yardley’s sensitivity to context could be considered part of Tracy’s rich rigor. Yardley’s impact and importance are similar to Tracy’s worthy topic. Finally, Yardley’s transparency is close to Tracy’s sincerity, credibility and trustworthiness. Transparency in positionality as well as methods is foundational in the opinion of this researcher. The reader is then able to reproduce the researcher’s journey and evaluate the validity of the research. Explanations of how this study meets each of Tracy’s eight criteria follows.

**Tracy’s Eight Criteria for Qualitative Research**

*Worthy topic.* This research may benefit millions of HSNCs. A better understanding of what helps them succeed in college can save society billions of dollars and reduce incarceration rates and many other social ills. The social cost of HSNC is immense (Heckman, Humphries & Mader, 2011). Anything that could reduce the negative effects of HSNC is worthy of study.

*Rich rigor.* This study includes an extensive literature review and study of the theoretical perspective of MT. The interviews of 6 -12 men for an hour each with member checking follow-up will yield a wealth of data that may amount to a small book. Focused questions and sophisticated analysis of the data can reveal new insights into this immense problem as a byproduct of a deep understanding of the participants’ shared experiences. Member checking and
triangulation (Smith, 1996) are ways to test the researcher’s constructed understanding of the participant’s constructed understanding. Detail is increased by interviewing multiple participants, using similar lines of initial questioning as well as returning to check back with the first participants if important topics and questions arise during later interviews.

Several different perspectives on the phenomenon of HSNCs succeeding in college will intersect and inform this study; 6-12 participants, the researcher, his advisor, and additional committee members.

**Sincerity.** The researcher has attempted to be open about his biases and positionality. He has a genuine interest in the topic and the students he will work with. He currently teaches in a community college with male students that sometime struggle academically and who have been HSNCs. He will provide copies of the final dissertation to all individuals that the IRBs of both schools and his committee require.

**Resonance.** This study has possible applications to several major social issues from the high prison population, high HSNC rates, to the economic and social cost each community suffers from the loss of the young males’ productivity and community contributions. HSNCs are neighbors, brothers, fathers, and children. They are among the poorest in the nation and are in need of understanding and support.

**Significant contribution.** This study could benefit millions of young men and those who are connected to them. Every American probably knows an HSNC and is impacted by their lives, many times negatively. Benefits of increased productivity, social health, improved school cultures, and reduced crime potentially can reverberate through many generations, affecting millions of lives and saving or generating billions of dollars and increasing social capital.
Solutions to this problem can produce generations responsible citizens. Finally, it is hoped that new variables for future study will be revealed.

**Meaningful coherence.** The author strives to produce a study that is coherent in theory, design, procedures, and analysis. He has worked to produce a study that will contain valuable and verifiable data that will increase understanding of the phenomenon of HSNCs who succeed in college.

**Credibility and trustworthiness.** For member checking, the researcher will provide the participants with copies of their transcribed interviews for them to review, correct, and amend to increase credibility. The themes, patterns, and tentative conclusion will also be member checked with the participants to receive their reactions, and feedback will be reported.

**Transferability.** IPA studies are not suited for generalizing to the general population. IPA is ideographic, focused on the individual. However, the deeper the phenomenon is understood the greater the possibility that the conclusions may apply to others experiencing the same phenomenon. There is also the possibility that the participants will benefit from the study; what is learned may transfer to other aspects of their lives and the educational system.

**Internal audit.** The researcher will keep a meticulous audit trail (Lincoln and Guba, 1985) of the data collection and analysis process. Raw data will be kept as well as field notes, recordings, records, and files, both paper and electronic that have any notes from interviews, the analysis process and theme generation. While conducting the interviews and analyses, the researcher will make numerous preliminary observations, form new questions, and begin to develop or discover themes that evolve during the interviews and in response to the data. Any preliminary versions of the analysis will be retained. New versions will be numbered and dated so they can be examined
sequentially to trace the development of the themes and conclusions. Finally, rationales will be given for the creation and use of super-ordinate themes that tie large amounts of data together.

**Ethical considerations.** It is important to protect the identity and personal, physical, academic, and emotional well-being of the participants. Interviews will be conducted in a place of the participant's choosing, including possible phone or Skype interviews, where the interview will not be overheard. They will be recorded with two password-protected digital recording devices, one as the primary and a second as a back-up. The digital recordings will be transcribed and the transcript and recording stored on a password-protected computer. The identities of the participants will be concealed with the use of pseudonyms, altering any identifying data from quotes or other references quoted in this study. The location of the study will also be kept confidential to the fullest extent possible. The true identity key of the pseudonyms used will be kept in a password protected device in a secure location. Recordings of interviews will be kept on a password-protected computer or recording devices until the dissertation is approved upon successful defense and published by Northeastern University; they will then be destroyed. Transcripts of those recordings will be stored in a secure, locked location for the time required by Northeastern University.

The reputation of Northeastern University, as well as RCC, will be preserved by publishing a study worthy of both institutions and by protecting the confidentiality of the study site and participants. All the requirements of the Northeastern University Institutional Review Board (IRB) will be followed, and relevant guidelines explained to the participants. Northeastern University standards of ethical research will be reviewed before initiating contact with any participant and followed during the entire research publishing process.
**Regard for the participant.** The participants may experience some discomfort when asked probing questions. Any questions that have the potential to cause upset will be carefully considered and used only if necessary to understanding the central phenomenon of the study with the ultimate goal of benefiting the participant and society. Every effort will be made to confine the questioning to the focus of the study. In the unlikely event, that information comes to light regarding the safety of anyone, either the participants, the researcher, the school personnel or anyone mentioned by the participants the researcher will report that information to his committee for advice on how to proceed. A teacher who is also a researcher has mandatory reporting requirements in this dual role when current child abuse or neglect is revealed or suspected. See the Massachusetts Dept. of Children and Families (DCF) website for details (http://www.mass.gov/eohhs/docs/dcf/promising-approaches-publication.pdf). The researcher has legal reporting responsibility and will do what is legally required if child abuse, threats of danger to a child’s caretaker, or criminal activity is revealed. This reporting role will be revealed to the participants before the interviews.

**Other validity issues.** Will the participant *fake the data* or produce a *Hollywood plot* where they appear in a better light, and everything turns out well (Connelly & Clandinin, 1990)? As an IPA study, the goal is to understand the perspective of the participant, not to find the true motivation in a positivistic sense. If the participant believes his story and it helps him succeed, then it is part of the data and worthy of reporting. As an idiographic study, the individual is the focus, not the general population (Ponterotto, 2005). The focus is on the understanding of the participant. Does the participant understand himself? Different lines of questioning may allow the researcher to gain insight that the participant does not have into his thinking. Therefore,
feedback during the interviews along with additional probing questions, and member checking of transcripts after transcription, aid in refining the researcher’s constructed interpretation.

**Self-reflexivity and Transparency**

**Positionality.** I am a white male with over 40 years of experience in education including nine years of cross-cultural experience in Haiti and Pakistan. I have teaching experience at both the secondary and college level including two community colleges in different states. I have taught in small private and large public schools, in urban, suburban and two international contexts in the developing world. I earned two master’s degrees and completed doctoral level coursework at the University of Colorado in 1996 as well as Northeastern University in 2015. I have witnessed numerous educational transitions and reforms.

**Experience with students.** Many of my current and past male students fit the profile of the typical male HSNC. I have spent my career trying different approaches to reach and motivate them with some success but less than I desired. They were more challenging to work with than college-bound students and consumed a great deal of time and energy to manage behaviorally and to follow up with academically. While most of my career was very rewarding and filled with positive people and experiences, I have suffered student verbal abuse, been injured breaking up student fights, threatened, and falsely accused by students. It was discouraging to work hard preparing interesting classes only to have some students choose not to engage in the material or to be so tired from late night activities that they could not focus. I need to process and bracket any residual pain and resentment and avoid projecting that onto the participants. I appreciate the unique perspective on education those experiences give me and seek to use them to help all students in the future.
**My educational path.** After a slow start, academically, in 9th grade, I succeeded in high school, often up late doing homework when I knew classmates were partying, drinking, socializing, or just indulging in entertaining media. I asked for the most difficult work load my senior year and raised my GPA and class rank from 30th to 15th out of about 350 in my class. I was the Junior class president and captain of a varsity state-ranked soccer team for two years. I received the student-athlete of the year award, earned high honors, graduated in the top 5% of my class, and was accepted by an Ivy League school. I was voted most popular and most likely to succeed. I moved seamlessly from high school to college and graduated in three and a half years. Over the following decades, I returned to school and earned two postgraduate degrees and am currently working on a terminal degree.

I also need to bracket residual resentment towards those who did not work in high school, who made life difficult for teachers and fellow students, yet feel entitled to the same economic and career rewards I have worked hard for. I hope this study will give me a better understanding of HSNCs and increase my empathy for them.

**White privilege.** My studies at Northeastern University have made me more conscious of social injustice. White privilege is real as is the social capital my White protestant parents provided in a middle-class suburb in one of the most privileged nations in history. My parents, grandparents and great-grandparents all adhered to the Protestant work ethic where work is valued and respected as a duty and gift. They all had intact marriages which contributed to emotional and financial security that I benefited from. That value was part of the cultural capital I received as a youth. To my knowledge, I did not experience racism or sexism although I felt poor compared to my classmates and other households in my neighborhood. I did not experience gender or racial stereotype threat when taking tests. My father taught school at the secondary
level, and my college educated mother was a full-time homemaker during my early school years. My father attended college on the G.I. bill which was theoretically available to all veterans of any race. However, existing social discrimination in housing and education, especially in the South, resulted in differential benefits for African Americans (Turner & Bound, 2003). I benefited from having a father with a G.I. Bill-funded education who survived the depression on a farm that was partly built by slaves 250 years before in Rhode Island. I worked for my maternal grandfather building houses. It is possible that he might not have been as financially successful and able to pay me if he were not white. My grandfather and his father, who was born in Sweden, built a successful housing company in the post-World War Two years in Rhode Island. If they had not been white they may not have had as easy a time in business.

**Male privilege?** At the age of 17 was asked to take a leadership role and lead music in a youth group that might not have been offered to an equally qualified female. I earned money at a construction job during summers that would also probably not been offered to a female. However, this male privilege has increased responsibility and even danger (Farrell & Sterba, 2008; Farrell, 1993, 2005). My freshman year of college, the student deferment was eliminated, and several of my classmates were drafted. Women were and are not subject to the draft. Farrell’s (1993, 2005) work opened my eyes to some of the disadvantages of being male in a modern Western society. His work as well as the numerous books on the problems boys have in school motivated me to do this study. I have increased empathy for male students.

**Pro-educational culture.** I moved seamlessly from high school to college and then to a teaching career by the age of 22. It was an assumption in my family that we all would go to college. My parents were supportive. I benefited from the practice of academic tracking in the 1960’s since I was placed in the upper track with classmates who were motivated and well
behaved. It must have been difficult to succeed academically in a lower track with lower expectations and unsupportive peers. I never cut classes, not even on senior skip day. My only detention was a misunderstanding. I was first seat trumpet in the concert and marching bands, and involved in organized athletics year-round. There was little time to get into trouble, and I had far more to lose than to gain by being anti-social. I did not drink, smoke, or do drugs, though I had longer hair than my parents liked, listened to rock and roll music, and opposed the Viet Nam War (to the dismay of my conservative parents). My highly structured upbringing and personal moral convictions protected me from the education-derailing experiences of drug addiction or fathering children before graduating from high school or college. I believe more people could succeed in education if they made good life choices and are given the opportunities and support. I believe success is a combination of internal and external factors.

**Cross-cultural global perspective.** My travels to over 40 countries and territories along with working in education in two developing nations for a total of nine years have given me a cross-cultural global perspective. My concern for the poor grew in college. I taught swimming lessons in an urban neighborhood, visited an elementary school on the south side of Chicago, and became more aware of global poverty issues. When I graduated I taught school for five years in Pakistan and traveled around India, Afghanistan and Iran as well as see some of Europe on the way to and from the United States. The school in Pakistan was mostly expatriates with a few middle class Pakistanis. The resources and facilities were basic and limited, but the students were motivated and self-controlled. Their parents were supportive and involved, even though it was a boarding school. Reading was a pastime for the students since there was only one television with a few local channels owned by one of the teachers. The students were very successful on international standardized tests, and most completed college back in the United States or Europe.
The school in Pakistan taught me that good teachers and motivated students are more important than new buildings and expensive equipment.

Later, I did educational research in Haiti for four years: I developed, implemented, and led teacher training in the Haitian language and correlated student reading levels with the training and saw measurable improvement (Mason, 1990a, 1990b). I also trained my Haitian assistant to take over the training when I left. Haiti is the poorest nation in the western hemisphere. The shock of seeing people in the extreme economic, physical, and educational deprivation of absolute poverty in Haiti and South Asia, has given me a different perspective on the relative poverty in the United States. Systemic political, social, and economic barriers to success in the developed world pale in comparison with the obstacles youth face in the developing world. My time in Haitian schools with minimal facilities and materials, staffed by teachers with little more than a sixth grade education, allowed me to observe education at the most basic level imaginable. Some classes were under a tree with students writing with their fingers in the air mimicking teacher motions. The poor uneducated Haitian villagers were looked down upon by the wealthy elite who were not happy to see them vote. During one of the first elections in decades I heard gunfire that was directed against poorer citizens standing in line to vote.

After my international experiences I taught in an urban majority minority school in the United States and observed the struggles and challenges young men of color face. There were frequent fights and disruptions. The self-defeating oppositional behavior undermined student success. The concept of oppositional culture seemed to describe the culture in the urban school (Fordham & Ogbu, 1986; Ogbu, Ed., 2008). This experience followed four years in Haiti where I observed very poor but motivated, hard-working, self-controlled students of African descent. I
read Willis’ (1981, 1977) description of White working class students in England, and I recognized the same oppositional behavior in my students of color. The school was reported to have had the lowest test scores in the state in spite of having a new building situated in a suburban minority neighborhood. The new laboratory facilities went unused because it was too dangerous open them up to students with low self-control. The school could not even keep toilet paper in the bathrooms as students would throw it around the hallways for fun. The following year, I taught in a suburban school with a pro-educational culture, and with motivated and self-disciplined students. The test scores were far above state average. The same teacher in two different schools with very different cultures produced very different results. It reinforced my belief from my teaching experience in Pakistan that a pro-educational climate and culture matter more to student success than funding and equipment. However, it added the observation that dedicated teachers without community and student support cannot do it alone.

My doctoral coursework on social justice, race, and poverty helped me see that the solutions are more complex than simplistic solutions of better discipline and more funding. Readings in social justice increased my awareness of systemic injustice that affects people of color in the United States. Critical theory and Critical race theory provide insightful lenses through which racism and injustice are made visible and challenged (Crenshaw, Kimberle, Goranda, Neil, Peller, Gary & Thomas, Kendal eds., 1995; DeCuir & Dixson, 2004; Ladson-Billings, 1999; Solórzano, 2013, 1998; Yosso, 2005; West, 2003). This study has social justice implications in that it studies one of the most vulnerable groups in the United States and seeks understandings that may benefit that group and help them confront structural oppression.

I will need to work to understand the perspective of a young male who has not had much academic success. HSNCs often face challenges that would defeat many others, including
myself, if I had to face the same obstacles. As far back as high school, I realized that if I had been born into a poor family of color in the inner city, my life would probably have turned out very differently. I will seek to be curious about the participants’ lives and enter into their experience nonjudgmentally.

**Limitations**

The small number of available participants limits transferability and generalizability of this study. Are RCC students typical or representative of community college students in general? If there were hundreds of potential participants, the researcher could select men representative of subgroups within different ethnic groups, classes, or life situations, such as former inmates or fathers in each of those groups. The fact that these individuals are rare argues for the importance of this study and the need for further study of this group. As a qualitative study, the goal is not to generalize but to gain a richer and deeper understanding of a students’ stories. The more varied the experiences of the participants, the broader and richer the understanding of this study can be. A more diverse group of participants could reveal new issues and potential solutions. RCC has urban and suburban campuses with a diverse student body. Diversity can make the results and conclusions more robust if similar themes are found across all the participants.

While the researcher has done a number of interviews and analyses in the past, he is a relative novice in the IPA methodology and will seek guidance from his advisor as he proceeds in the data collection and analysis.

The participants are relatively young and inexperienced in their college careers. They may not have reflected much on the causes of their success so their perceptions may not be well formed or informed. They may not be adequately articulate to accurately describe them to the researcher. Follow-up questions and member checking will be used to increase the clarity of the data and accuracy of the study.
Discussion

What causes a male HSNC to succeed in college is multifaceted. The causes may not just include macro-external, structural-political and environmental factors, but also micro-internal, socio-emotional factors. It may not be an either or but both and phenomenon. The sociological and political as well as the individual psychological realms have explanations at different levels of analysis and organization, and both can reveal potential solutions. Wealthy suburban students’ success involves both individual and systemic elements. It takes good teachers and well-supplied schools, but also individual students doing homework and being read to as children. Students need involved parents who model the behaviors and socio-emotional skills that made them confident and successful in school. It appears that social justice and a supportive pro-educational culture, as well as personal responsibility and effort, are needed for students to succeed in school and life.
Chapter Four: Findings and Analysis

The purpose of this study is to understand how males, who did not graduate from high school, but entered college using a high school equivalency certificate (HSEC) or some other entrance test and succeeded in college. Success was defined as completing at least one semester with a 2.0 GPA or higher. All the participants exceeded this threshold. One is in grad school and another finishing medical school.

There were four superordinate themes of supporting success found across all of the participants to varying degrees. Two supports were more internal, related to the participants’ thinking and two were more external, involving the participants’ interpretation of their context. The internal superordinate themes and their subthemes were: 1) Motivating career goals (1.1 Meaningful, 1.2 Achievable, 1.3 Interesting, 1.4 Income, 1.5 Social Respect); 2) Cognitive-emotional (2.1 Growth Mindset, 2.2 Planfulness, 2.3 Maturity, 2.4 Agency). The two external superordinate themes and their subthemes were: 3) Structural supports (3.1 Academic flexibility, 3.2 Employment, 3.3 Social norms, 3.4 Mental health, 3.5 Finances); 4) Social supports (4.1 Encouragement, 4.2 Extra-curricular involvement).

I looked for themes that most or all the men shared and that seemed significant to them. Some of the themes such as Growth Mindset and Grit reflect my experience with educational terms but I feel they accurately describe the understanding of the men. They use phrases such as Steve’s, “pushing myself through” or Greg’s, “quitting isn’t in your vocabulary when you are a solider” instead of “Grit”. In this chapter these themes will be explored and supported with quotes from the interviews with the men. Table 1 below lists the themes and which participants seemed to exhibit or express and to what degree. “Yes” indicates a clear expression of that trait,
with “less” being a moderate expression or less clear expression and “no” indicating an absence of that trait in the data for that participant. These data represent a small window into the complexity of these lives. I cannot presume to think this is a complete or total picture of the men, but it is a start and the information gleaned has increased my understanding of this phenomenon.

### Table 1 Identification of Recurring Themes

<table>
<thead>
<tr>
<th>Superordinate Themes</th>
<th>Tom 39 Professor</th>
<th>Steve 20’s Sci Lab/Me dical</th>
<th>Jake 33 Doctor</th>
<th>Dustin 23 Police</th>
<th>Greg 37 Writer</th>
<th>Connor 22 Nurse practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Motivating Career Goals</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>1.1 Meaningful</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>1.2 Achievable</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>1.3 Interesting</td>
<td>YES</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>1.4 Income</td>
<td>YES</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>LESS</td>
<td>LESS</td>
</tr>
<tr>
<td>1.5 Social respect</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2) Cognitive-emotional factors</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2.1 Growth mindset</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2.2 Planfulness (grit, delayed gratification, &amp; self-control)</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2.3 Maturity</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>2.4 Agency</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>3) Structural supports</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>3.1 Academic flexibility</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>3.2 Employment</td>
<td>LESS</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>LESS</td>
</tr>
<tr>
<td>3.3 Social norms</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>3.4 Mental &amp; physical health</td>
<td>LESS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>3.5 Financial</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>4) Social supports</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>4.1 Encouragement: role models, parents, peers</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>4.2 Extra-curriculars</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
Motivating career goals

Time and time again the men talked about their goals. I describe them as motivating career goals because they were more than just dreams, they were real possibilities. These goals seem to be the key to their success. Without them, it seems unlikely that they would have marshaled all the other factors needed for success, at least academic success. They spoke about the dreams they had for the future in glowing terms. Reflecting on the goals they had it appears the goals themselves all shared the same five factors. Motivating career goals found in the data included five elements: achievable, interesting with increased income, improved social standing and meaningful. The following section will expand and support each of these elements of motivating career goals.

Achievable Goals

The goals the men described seemed achievable to them. They were drawn to a dream of their brighter future. Steve was particularly aware of the importance of goals and gave this advice:

I never lost sight of what I was doing…you have to be independently motivated…it is just trying to see something at the end of the tunnel, like making sure to keep in mind what the goal really is and not losing sight of the goal, not thinking it is something that is unattainable or feeling like it’s not really going to [happen]. You have to really make sure that you are motivated by that end goal.

Many of the goals had connections to work experience they had or had witnessed. This may have helped them see the human side and that they could fit into those roles. Jake worked in a veterinary clinic. He was also an EMT. Dustin saw police work when he rode in ambulances and also as a firefighter. Connor saw nurses at work during his frequent hospital visits, “I moved in and out of the hospital for a little bit…that’s my exposure to it and I always thought I would love
to be helping people.” This exposure to the people in those lines of work possibly gave them the hope that they could do it too.

I was particularly amazed by Jake’s goal of being a doctor after having little academic success up to that point. His motivation to be a doctor has carried him through an undergraduate degree, a master’s degree and now he is in his fourth year of medical school applying for a medical residency. He is a man who failed at community college:

I started community college…and I basically didn’t get anything done. I kept dropping out of classes like I would like withdraw or I would fail or get D’s. It’s amazing my transcript was like. I don’t even know how many classes I went through, how much of my dad’s money I went through, but it was embarrassing when I look back, and I kept screwing up.

Jake also may have doubted his ability to succeed when he pondered, “I kind of wonder that if I had not abused substances, like alcohol, would I be more smart than I am today.” Yet finding a motivating career goal seemed to change everything. Here is the way Jake described his turning point:

I was working as an EMT, and...this...physician...telling me you can do this, you can pursue medicine...there was just kind of a combination of things and that kind of snapped me out of it…I looked at my paycheck every single month and I thought I’m never going to be making any more money than this, this will be what I will be doing for the rest of my life and I am way more capable than this...I just thought I’ll just do what it takes to pursue the medical school and that was my goal to be a...physician. He continued, I had a real goal in mind, I set my mind that I am going to be a...doctor.
At one point Jake explained how he could go from failing to succeeding. It was not a change in the effort as much as where the effort was directed. He confessed, “I was really good at being bad and then when I decided to do good I was really good at being good, yeah like I really just gave it 110%.” He always had a work ethic but it was misdirected. When he found a better goal it propelled him in a new direction. Jake’s summary included all five aspects of a motivating career goal:

- **humanitarian (meaningful)** because that’s what you want to do, … you want to help people and you want to be there for people… Also, I appreciate the **challenge (interesting)** and the responsibility and the complexity, you know, obviously I like hard things (he thinks it is achievable). I get bored when things are too easy… So I thought, hey, you know people respect you and you get good money and that’s not bad either” (I put key words in bold italicized print and my interpretations are in parentheses).

In this quote, Jake’s description of his goal to be a doctor includes meaningful as humanitarian and responsibility, interest as complexity and difficulty, social respect and finally increased income. It was notable that he omitted achievable. Is it possible that he did not think much about that because if he did, he might have given up? Instead, he says a switch went on and

In contrast to the other men, Tom’s goals varied between professional musician, counselor, and psychology professor. His goals seemed less concrete or developed and competed with each other as he took time for music practice and attended music concerts where there was substance abuse. Reflecting on the table, it stood out that Tom had fewer “YES’s” in his column. Tom came the closest to not finishing college and his life was starting on a downward trajectory due to alcohol abuse during his last year of college and afterward.
Meaningful Career

The men described their goals as having a humanitarian, social benefit, such as a career of service to others. Greg said, “My overall goal is to work for the VA in some capacity to help motivate other veterans who are struggling with PTSD.” Dustin is interested in law enforcement where he will risk his life for others daily. Dustin enjoyed being an EMT but saw that he could do more for people and earn more with more education. “I want to get into a full-time position and a career in public service, and you really can’t do that without at least a four-year degree.”

Tom is in his late thirties; he finished a four-year degree at a private college over fifteen years ago. After an unpleasant middle and early high school experience, he left high school before graduating. He had negative interactions with authorities, high absenteeism, and found high school boring and pointless.

Tom wanted a meaningful career that also helped others, “I would work myself back up to graduate school and get my CSW (Certificate in Social Work) and eventually become a professor of psychology at a university.” Tom sought higher but more nebulous goals, “I always thought (his goal) was the most meaningful and what sustained me during college … was the sole knowledge that love, compassion, peace and harmony, freedom, space, it’s really a whole lot.” He did not finish the thought but moved into talking about the peer to peer movement.

Jake wants to be a doctor. He said regarding his goal, “it starts out as humanitarian, because that’s what you want to do, you want to go, you want to help people” As an EMT Jake would see doctors in the emergency rooms who were making more money doing very interesting work, had more respect and did more good for people than he could with his training. Steve got into a career he enjoys and pays enough working in a university science laboratory, helping teachers and students. Connor had a number of medical issues that landed him in the hospital
where he interacted with and observe people in the medical field. This exposure resulted in him realizing that, “… my dream goal is to be a nurse practitioner…I always thought I would love to be helping people.” A career goal that was socially responsible and meaningful seemed essential to the men.

**Interesting Career**

Most of the men found high school meaningless or boring but when they found a motivating career goal they were able to get through general requirements in college that they would otherwise not have found meaningful. They enjoy all their college classes but they saw them as necessary in order to achieve their career goal. The temporary jobs most did were less engaging than the work their ultimate career goals would require. Dustin found law enforcement interesting, Jake found medicine interesting and Tom being a college professor. Greg loves writing and wants to do it professionally. Connor did not mention the interesting part of nursing specifically, but it is constant with this theme.

**Income Potential**

Several of the men were employed to help finance their education, but none had a high income. At the time they were interviewed only one was earning an income using his education, one was working at a job not directly related to his education, the other four were still in school. There are high paying exciting jobs that do not require a college education, but they are usually dirty, dangerous or very physically demanding (including professional sports). Connor said his girlfriend told him, “you should quit and just go get a trade job.” There seems to be an income aspect to a motivating career goal that requires college. However, none of them appeared to choose their particular career goal just for the money.
The men wanted a life-long career that offered a higher income than the jobs they were doing at the time. Greg wanted more than a “dead end job.” Steve I am definitely happy that it is a job that pays reasonably well and it does provide me with good benefits…. Jake “I looked at my paycheck every single month and I thought I’m never going to be making any more money than this…” Dustin shared, “as much fun as it is to be an EMT, as much fun and satisfying as it is, it’s not a career path…” Dustin was aiming for a career as a full-time position with better compensation since he was working two part-time jobs and still not earning enough.

Career with Social Respect

The goals included an increase in social standing and self-concept. Jake: “I was dating a girl so that was more accomplished than me.” He added as he reflected on his current job, “I will be doing [current job] for the rest of my life and I am way more capable than this.” In the following quote, Jake seemed to be propelled by the desire to prove to people who knew him before. “I really want to prove to people that I really did make something of myself but also I’m not really that piece of crap they probably thought I was.” Tom liked the idea of being a college professor, “I would still be involved in the college scene if I became a college professor.” It seemed that gaining the admiration of college students, the way he admired some of his professors, was motivating to him.

It was difficult to tell if this was the primary goal as for the men, but it seemed to be a minimum requirement or a necessary component of a career goal that motivates. Any career that was worth pursuing had to pass through the socially respectable filter. Tom seemed to like the idea of being a respected, even admired professor and while he expressed frustration with the professionals and drug companies, he thought psychology could help people if done right. Steve found science laboratory work at a college fit his interests and personality, is respectable and can
be done in a socially responsibly way, especially with the new emphasis on green chemistry. The goal of being a medical doctor is probably the highest in social respect, and few would question its social benefit. It is highest on the pay scale and it requires the longest and most difficult academic preparation. Medical students graduate with student loans in the hundreds of thousands of dollars, and that is true for Jake.

Dustin admires law enforcement which is highly respected in most circles and socially responsible when done well. Greg wants to work with veterans, respected and responsible though possible one of the lowers paying careers. Even though Greg is following his writing passion, he is envisioning a socially responsible way to use it. Finally, Connor also seeks a medical career, though it will pay less and garner less social respect than being a doctor, it will take less education and money to achieve it. It is easier to rank income and achievability than it is to rank interest, meaningfulness, and social respect. Jake was doing EMT work saving lives, but the pay was less than he desired.

**Conclusion on Motivating Career Goals**

Motivating career goals seem to be key to academic success for these men. The goals they spoke about were long term career dreams. There was some talk about short term rewards for studying, but those were ultimately for the higher purpose of achieving a satisfying career. Motivating career goals helped the men get through some challenging classes with some inflexible teachers.

The data from the interviews on goals seemed to organize into five areas related to careers: meaningful, achievable, income-producing, interesting, and respected. I was impressed with how vital career goals were to the men’s motivation to succeed in school. The careers that motivated academic success required an academic credential.
Cognitive-Emotional Supports

After motivating career goals, cognitive-emotional is the second internal superordinate theme. Having a strong cognitive-emotional support is not less important than the motivating career goals but it is less specific, it is more the soil that goals take root in. It is a necessary precondition to academic success but could support success in any area. Initially, this was socio-emotional or noncognitive skills; the soft skills but the social part seemed to be distinct in the data. Social factors are external to the men and involves other people in their lives. The cognitive-emotional is inside their heads. Splitting cognitive and emotional was not possible when considering the subthemes of self-control, or optimism and maturation. Each of those has a cognitive aspect and an emotional. Jake feels optimistic because he assesses his ability and cognitively concludes that his goal is achievable, “I am way more capable than this...I just thought I’ll just do what it takes to pursue the medical school.” Self-control is a cognitive choice but often to resist an emotional or sensual pull in a less constructive direction. It is interesting that the sub-themes dictated a need to split the social and the emotional into different categories. Working inductively, the researcher must resist the temptation to impose a common educational psychology term on the data, but rather let the data dictate the superordinate theme formation. The cognitive-emotional themes were Growth mindset, planfulness, maturation, and agency. The first sub-theme discussed below is Growth mindset. This theory described a cluster of traits the successful men shared.
Growth Mindset

Mindset theory is the guiding theoretical framework for this study. A guiding theoretical framework has the potential of biasing the study. However, everyone has a theoretical framework whether they are aware of it or not. If they claim to have no biases, the reality is that they will still be biased but be unaware of their biases and inconsistent in applying them to the study; mixing various theories randomly and unconsciously as they analyze the data. Growth mindset (or any guiding theory) can act as a lens through which to view the data. It can reveal new perspectives and insights. In this study, the researcher acknowledges the role of Mindset theory played in forming some of the interview questions and themes, and deliberately looked for it. I also considered other themes and theoretical perspectives including the possibility that Growth mindset was not helpful or was not the primary factor in student success.

The participants never brought up the concept of Growth mindset and none were familiar with it though Steve had heard of it. I did not expect the older participants to know about it, but I was a little surprised and disappointed that the younger men had not either.

When I started to describe Growth mindset to Tom, he thought it sounded like “the power of positive thinking.” He also connected it to his spiritual Faith, “Growth mindset and the power of positive thinking and on the balance, anything is possible especially with Christ.” These connections were his understanding of life connected to a basic understanding of Growth mindset. Tom talked about stress affecting intelligence and fresh starts in college and I realized I was not making the concept of Growth mindset very clear so I moved on to other lines of questioning. I could infer or extrapolate from their other answers but there was a need for standardizing questions related to Growth mindset, especially since none were very familiar with
the theory and thus would not recognize it in their lives unless it was pointed out. One can become more Growth mindset intentionally but many are already predominantly Growth or Fixed in their mindset before they ever hear of the concept. After the interviews with Tom and Steve, I felt the men needed to be expressly asked Growth mindset assessing questions from a standardized survey developed by Dweck (2006) as a starting point. The questions could diverge from that common ground.

I was able to get the men to respond to major survey statements and to probe their recollection of their mindset in high school and present whether they have become more Growth mindset or not. The men were asked orally to respond on a Likert scale from strongly agree, agree to disagree or strongly disagree with several Growth mindset survey questions. Here is an overview of a few of the items from the survey and their oral responses.

After I described it I asked if they thought they had a Growth or a Fixed mindset. There were mixed responses but most responded with a Growth mindset to most of the questions. For example, Steve believes, “You can improve…all the time you put in really does pay off and just over years and years of committing yourself a little bit to doing something that you do get better, it’s encouraging.”

Statement: your intelligence is something very basic about you that you cannot change very much. Jake, “I would disagree, I would disagree with that” which is the Growth mindset response. Greg also disagreed, and Connor strongly disagreed. Dustin disagreed and added, “I think it’s flexible.” To the statement, “The harder you work at something, the better you will be at it”, Jake responded, “Strongly agree.” These Growth mindset beliefs may have contributed to their college success.
Here are some of the men’s Growth mindset responses to a reverse form of the previous statement: “No matter how much intelligence you have you can always change it quite a bit.” Greg agreed, Connor: “Of course. Strongly agree.” Jake, “I would strongly disagree.” and to the statement, “The harder you work at something the better you will be at it” and Jake responded, “Strongly agree.” Mindset theory holds that intelligence can increase with effort and use.

Some participants realized that they had a Growth mindset increase since high school. Steve said he scored more Growth mindset now, but was less so in high school. Greg reflected, “I would probably agree with that (fixed mindset view of intelligence in high school). I think in high school I didn’t really … I was limited in that I couldn’t do anything about it.” When I told Connor, “you sound very Growth mindset and would you say you would have answered the same back when you were in high school?” Connor responded, “Probably not actually”, “I could definitely see myself as being more closed (fixed) mindset when I was younger.” Steve recalls his feelings:

In high school I would just become completely panicked and as I went through and into the later years (of college) I definitely thought of it more, just like another day, when you just have to sit back and it would be more like an opportunity.

High anxiety or fear of challenges is a Fixed mindset trait but framing challenges as opportunities is a Growth mindset characteristic. This seems to indicate a transition from a fixed mindset in high school to Growth mindset in college for Steve.

These data support the hypothesis that HSNCs (high school non-completers) might have a fixed mindset but go through a transition to a Growth mindset that helps them succeed in college. None of my participants left high school because they could not manage the academics due to a deficiency in intellect. They left high school mostly because they could not tolerate or
manage the cognitive-emotional aspects of high school, including the boredom. Growth mindset does have some connection to resilience and flexibility, learning from failure or disappointment and could have helped in managing the social aspects of high school and may not be helping the men manage the social aspects of college.

Not all the men saw a change but Jake already had a Growth mindset. Jake R: “Would you say you were that way as a teenager too?” Jake: “Yeah I definitely was.” Jake did not need a change in mindset to succeed, he already had a Growth mindset (even though he would not have labeled it as such or been aware of it).

Tom seemed to have the least Growth mindset and also experienced less success in life after college, though he did finish a four-year bachelor’s degree and most of the other men have not yet, they are still in school. Tom had enough confidence in his intellectual ability to help him get through school even with a somewhat fixed mindset. A fixed mindset is more of a problem when you face difficult challenges, it can be hidden if there is success in spite of it.

To summarize, Growth mindset did correlate with success for most of the men, and it probably supported their success. However, they did not attribute their success to this trait, they were unaware of it, yet held Growth mindset beliefs that were probably helpful in achieving academic success. Again, like the superordinate theme this fell under, cognitive-emotional, it may be a necessary or at least helpful trait to have in academic life, but not sufficient alone to cause success. In addition to motivating career goals, the following traits appear to be needed for academic success.

**Resilience.** Resilience in this context is the ability to recover and not quit after a setback or to tolerate a demanding professor or unfriendly peers in class. This is similar to grit and could be considered a skill or trait essential to grit but the men expressed interactions that could have
derailed their progress but they chose not to let them. I nest resilience under Growth mindset because people with a strong Growth mindset are more resilient. They can accept criticism and failure as teachers instead of judges.

Steve explains,

“the classes where I may not have liked the professors as much I probably didn’t do as well in” and, “I did procrastinate a lot and then when I completed the work and the professors did not accept it, but it’s okay to fail sometimes, but it’s a good feeling in the end when you know you made the effort…. I actually wrote two term papers for that class and handed them in twice after receiving an incomplete and she would not even look at them, she would not accept them.

This would be even more of an issue if he failed the class and lost money and credit. Steve recalled one professor with poor emotional regulation, “she flipped out on us and started screaming.” Dustin “if you don’t agree with their politics or anything like that then you are automatically the outcast” referencing peers’ politics; he was more conservative. A professor addresses Greg, “do we even want people like that here?”

The veterans expressed a feeling that there was an anti-military bias in more liberal affluent schools that they had to tolerate. Greg “one of the kids in his classroom…told him he was a murderer and a racist.” Another time, Greg felt he received a lower grade because he referenced his military experience,

“He just gave me a B on the paper because he didn’t like the idea of the paper (he referenced his experience in Iraq). I thought up Iraq, I am like, I’m sorry I can’t help it, you know, I mean I am bringing up these ideas up, so yeah I found that a little frustrating but whatever, he still passed me”
Greg expressed the attitude “just roll with it” when recalling the self-talk that helped him deal with something frustrating happened. He also felt that his military experience trained him to manage his feelings, “it’s really hard to hurt our (veterans) feelings.” Greg. “you can’t let the little things bother you, save it for the big things, you know, but always know that life has a funny way of working itself out sometimes, even if you don’t feel like it right now, eventually you know, good things will happen for you.” Greg had a metaphysical belief that life was fair and that allowed him to accept some temporary injustice because it would be fair in the end. And Greg “I had to grow up fast in the military.” He developed the cognitive-emotional skill of not internalizing other people’s negativity or taking criticism personally or allowing it to activate him emotionally. Without resilience, a student might feel defeated and consider dropping a class or leaving school completely.

**Planfulness**

Planfulness is an executive brain function that utilizes imagination to sequence ideas into the future. On its own, it creates a vision of what the future can be and the steps needed to arrive at that future goal but it needs other cognitive-emotional skills to realize the plan. In order for a planful person to follow the envisioned plan, he needs self-control, grit, the ability to delay gratification.

Connor plans, “I always give myself a buffer just in case I have to work.” His work sometimes requires emergency calls in the middle of the night. He was planful when he asked his professors ahead of time if he can record their class at times when he is so fatigued from working at night that he had trouble paying attention. Connor also demonstrated planfulness by getting ahead on his schoolwork, knowing that he might be called into work at night. He did snow removal and maintenance for several buildings and he would get calls at 3 in the morning with
tenant needs and end up exhausted the next day but still go to class. Dustin explained his plan, “I typically do my college work two days in a week, on Thursday and Sunday. Thursday I’ll spend a few hours on it and Sunday I’ll spend two to three hours on it, and that will be it for the week.” Jake had a clear goal and was motivated, “I’ll just do what it takes to pursue the medical school, and that was my goal.”

All the men had to plan well enough to register for and complete numerous academic courses. Some of them took a longer road, changing career goals or majors. STEVE took a semester off but then got back to the plan. Jake took a while to get started on a plan, “I basically did not get anything done. I kept dropping out of classes like I would like withdraw or I would fail or get D’s.” Dustin was fifteen when he first started college classes. He did not have a clear goal, “I think I changed my major maybe four times in about the first year, year and a half.” Tom had a plan, “I would work myself back up to graduate school and get my CSW and eventually become a professor of psychology at a university,” but it never worked out due to a combination of substance abuse and a deficit in follow-through skills (grit, ability to delay gratification, and self-control).

**Self-control.** Self-control is the ability to choose and follow a more productive plan that leads to a higher goal. It involves deciding not to give in to instant gratification and weighing options and choosing the long term greater good over the short term pleasure. One time, when I called Connor and asked if he was available to interview, he said he could not, he had to study. He was able to set boundaries and stick to his plan even though the interview might be more interesting. The interview experience seemed pleasant to the men. A researcher was truly interested in their lives and listening to their experiences. Thus, turning down a chance to be interviewed can be seen as self-control and delaying gratification. Connor also prioritized his
academics over his romantic relationship and his girlfriend is sometimes upset when he cannot go out because he chooses to study.

Tom had less self-control when it came to managing the party culture and substance abuse in college. The party life at college interfered with his academics. He reflected, “alcohol and the women…I’d say they were more alluring than academics.” Tom “resolved” that he would enjoy himself and had calculated his grade point average so he knew exactly how much work he needed to do to graduate. Tom explained,

being able to have a good time at that point in my life (I) had *resolved* to be the only time in my life where I would be able to have a lot of fun and I factored my GPA as being able to graduate.

Tom’s choice to prioritize more immediate gratification and pleasure was in contrast to the other five men who seemed to manage that area of their lives during college. Tom is further along in his life than most of the others so it is not a direct comparison. At the same stage of college most of the other men are in, Tom was more self-controlled.

**Grit.** Grit appears to be another sub-theme that can be nested under planfulness, since it takes many moment-to-moment acts of self-control and delayed gratification decisions to be gritty and stick to the plan. Angela Duckworth, the author of the book *Grit* (Duckworth, 2016), defines grit as perseverance towards a long term goal. The men clearly had grit to get as far as they did. They never used the term but recognized the concept when I brought it up and expressed it in phrases such as when STEVE talked about, “pushing myself through.” STEVE, “I study pretty hard, so I did okay, sometimes it was just pushing myself through the more longer-term assignments, especially like term papers.” And “I realized more and more, that it’s a lot more about the work you put in things than anything else.”
After I defined the term, Jake said, “Yeah grit for sure, that is what I have got.” Dustin exhibited grit; he went to school full time and held down two jobs. Greg expressed grit as not quitting, “quitting isn’t in your vocabulary when you are a soldier” and when something at school was not perfect he said, “you need to suck it up.” Again Greg, “honestly at the end of the day the thing that is the motivator is I didn’t want to feel like a quitter.” In order to maintain his view of himself, he was motivated never to quit. Greg put it this way, “I just knew I had to dig my heels in and deal with it.” Connor reflected on his level of grit, “I definitely believe I have more grit now than I had back then” and “how I need to move my life along if I want to continue to and do what I want in my future.” I interpreted these expressions as signs of grit in these men. Jake has succeeded through at least 12 years of schooling after he left high school initially. That alone indicates that he has grit. He did return to high school and graduate but only after hearing that the GED was not worth getting.

**Delayed gratification.** Another facet of planfulness is delayed gratification; the ability to wait for reward or put off immediate pleasure for a greater good in the future. It requires deliberate choices to deny short term desires for the promise of a greater good in the future. Connor put it clearly, “Yeah, it’s about delaying gratification. I’ve been working at my future.” He still lives part-time with his parents; he is delaying full independence. Fortunately, he has a girlfriend whom he can live with some of the time, and where he actually gets more work done who is also delaying her financial gratification (in a marriage to an unemployed spouse) in order to help him finish college. Connor is able to delay gratification, partly because he has an understanding romantic partner, as does Jake. If a spouse or romantic partner can also delay gratification, it can be a support to the student. If not, as in the case where Connor was encouraged to get a trade job, it can endanger academic success.
All the men had parents who modeled delayed gratification. It is likely that they were taught to delay gratification without ever hearing those words. Many parents often tell their children to wait, or finish your vegetables, or do your homework before you watch any television or text friends on your phone.

Greg used to do his work at the last minute but,

now when I get an assignment I’m that guy that goes to the professor at the beginning of the semester and when I don’t see the final exam on the syllabus I want to know what it is and now I spend a couple hours a week researching or whatever so that way when the final comes I am not running around like a lunatic.

He matured in his planning and ability to delay gratification. This maturity could be cognitive and neurological development.

**Maturity**

Something seemed to click for some of the men as they age. Was it biological brain development or an evolution in their thinking? Greg earned a GED certificate before his peers graduated from high school and was in the military when his former high school peers were in college. Jake left high school for a couple of years but they went back and finished. However, after graduating it still took him a few more years before he found a goal that would motivate him academically. Looking back Jake wondered, “why I would make such incredibly dumb decisions and I thought it’s gotta to be because I didn’t have a freaking frontal lobe till 23.” Jake suspected he had ADHD, “I think I did kind of grow out of it I think that frontal lobe myelination helped.” I had described a study that found the frontal lobe myelinates in the early twenties and how that may explain some of the apparently irrational choices teenagers make. He described his eureka moment:
I was dating a girl that was more accomplished than me and there was just kind of a combination of things and that kind of snapped me out of it, but at some point of time I looked at my paycheck every single month and I thought I’m never going to be making any more money than this, this will be what I will be doing for the rest of my life. And I am way more capable than this, I think I just kind of snapped out of it in 2006 and then I just thought I’ll just do what it takes to pursue the medical school and that was my goal.

It is almost as if his experience, biologic development, and cognition regarding goals and plans all came together at one point in time and from then on he was on track academically.

Dustin, “I wanted to get away from high school and grow up.” Most of the men found high school confining, lacking choice and autonomy. They did not see connections between high school curriculum and life. High school content seemed meaningless and as a result, boring. Dustin flourished in an environment where he had more autonomy. Greg matured during his time in the service, “I had to grow up fast in the military … I’m definitely more mature now.” He attributes his maturity to experiences more than age. One cannot choose to develop faster biologically; Greg felt maturation was more of a cognitive transformation.

Searching for a definition of maturity resulted in a wide variety of answers. It is difficult to define and explain, it differs from group to group and culture to culture. It often includes self-control, grit and delaying gratification along with many of the other cognitive-emotional skills observed in this study that aided the men in their success.

Agency

Agency or self-efficacy can also be called empowerment or taking personal responsibility. It is a non-victim mentality: where the individual feels in control of their life and chooses the direction they want without blaming others or their environment for not ever trying to achieve a goal or for failures along the way. Greg advises others to be agents of their own
lives, “Nothing is going to be given to you, you have to go out and get it, and that’s probably my best advice I can possibly give.” All but one of the men had this mentality and the one who was low on agency struggled the most in high school and college and life after college.

Steve explained the key to his ability to get school work done, “(I) will myself to actually do stuff.” He describes good habits he developed or “willed” himself to follow, “I always sort of did my work right, I lived in a dorm and I kept to a pretty strict schedule, I went to bed before everyone and I always spent some time at the library.” He took conscious command of his life. Finally, he explains how he got better at school, “committing yourself a little bit to doing something that you do get better.”

Greg expressed a belief that “life has a funny way of working itself out sometimes, even if you don’t feel like it right now, eventually you know, good things will happen for you.” Whether this is true or not, believing it is true helps avoid a victim, self-defeating attitude. In an IPA study, the participant’s beliefs are key, not the reality. This is also true for motivation, and motivation is a key factor for academic success. As Henry Ford once said, “If you think you can or you think you cannot, you are right.”

In contrast, Tom externalized blame and took on a victim mentality at times, blaming childhood abuse and psychological misdiagnoses for academic problems. He reported being bullied and marginalized in high school, “it certainly wasn’t conducive to using my brain.” He accused the pharmaceutical industry of pushing Ritalin for profit at the expense of people which he says hurt him his senior year of college. He blames alcohol for his marginal health now, “alcohol is just as bad (as illicit drugs) and a lot worse because it killed my liver.” He stopped going to school with just a semester to go and took what he called a “gap year” when he traveled “abroad.” This would not have been an option for most HSNCs. Looking back Tom wondered, “I
think if someone had taken me under their wing…one on one coaching, someone that listened to me. I wanted to go to music school instead of that I dropped out.” Tom switched to another topic that also expressed some victimization, “I had a lot of problems with self-consciousness and I was misdiagnosed depression.” He had many distractions in high school.

Agency, the belief that the men can make significant choices about their lives appeared to be one of the pillars of success for these men. They seemed so attribute much of their success to their own good choices and effort. Whether true or not, it is an area in which they feel they have some control. They cannot control or change their parents, their past, or childhood and school environment so feeling in control of their future destiny seemed a common motivating thread in their stories.

**Structural supports**

Structural supports are external to the person. Social, cultural, political, infrastructure and any other external factors that can support student success. Five areas were found in the data that aided the men. They are academic flexibility, employment, social norms, mental health, and financial supports.

**Academic Flexibility**

Adult learners with jobs and families find flexibility in the academic setting can aid success. Night classes, online classes, and other flexible scheduling allowed the men to fit schooling around their work and family responsibilities. Schools that offer more flexible scheduling can attract more diverse students. Often these adult learners are older mature men with more responsibilities. They can significantly enhance the culture and climate of a classroom with their experience.
Class Schedule Flexibility in College

A variety of class meeting times in the school calendar allowed the men to fit school with their work schedules and family responsibilities. Night classes not only provided schedule flexibility but social as well. Dustin felt more at ease in college, “the night classes are the most interesting because you have a lot of working people, you have a lot of weird (people)…so there is a place for everyone in those rooms.” Asynchronous online classes helped Dustin, who now has 82 hours of credit at a four-year college and a 3.8 GPA, “the class module will be open and all the resources for the week will be in there and you can go in … anytime day or night and check out the papers and assignments and turn them in.” Flexibility within the structure of the class also was a help.

The men preferred limited or no group assignments for grades. It is hard to schedule and meet with a group especially if they are all commuters with jobs. It only takes one non-worker to make it difficult for the group and can result in an unfair grade, either too low for the workers or too high for the non-worker. Connor recalls an incident,

One of the people decided not to do any work the entire semester…then the week before he presented it to us in the project, and he presented it to us and it is utter garbage…so we did it for him.” They did not or could not report him so they all received the same grade.

Steve liked the way you can take a semester off in college and regroup. He felt he could not do that in high school where everyone knows him and he would fall behind his classmates and not graduate on time. In college, people often graduate at different times. He explains,

being able to give myself a little bit of a break and like take a semester off and keep going with it, because you know stuff happens to all of us, that we take a step back when
we need it, that it is a good thing, that you are not just forced down this “You must be on a four-year traditional student track.”

Steve then returned to school and graduated with a science degree that he is using in his career.

**Helpful, flexible, relational professors.** The men preferred teachers who were flexible and understanding. Inflexibility was something that threatened the success of the men. Not only because it hurt their grades but their feelings as well. Dustin, “I actually wrote two term papers for that class and handed them in twice after receiving an incomplete, and she wouldn’t even look at them, she wouldn’t accept them.”

Connor was able to be more understanding when deadlines were a problem if he thought of them as job deadlines, “when I want to quit a class…especially for due dates maybe…but in real life if you are working on a project and you don’t make the deadline you might have to be looking for a new job.” Connor also was proactive going to teachers and getting permission to record a class if he came in exhausted from plowing snow all night or fixing something at three in the morning for the apartment complex where he was the maintenance person.

Another barrier can be having difficulty navigating the school or class website, especially for new students Dustin expressed frustration, “I wanted to just drop (the class) but I didn’t understand the school computer system.” Computer programs are generally not very flexible.

**Employment**

Employment, including the military, provides money for tuition and life skills in self-discipline, organization, and dealing with authority that can transfer to an educational setting such as meeting deadlines, being on time, following class rules, working with others, and understanding and navigating the unwritten rules of the office or military culture. Greg was the only veteran Greg R: “so you used the GI Bill? Greg: “Yep” He added, “I had to grow up fast in
the military.” Greg references another veteran who was called a “murderer and a racist” by a classmate but he did not quit school. Greg said, “you can pretty much say whatever you want to us and it’s really hard to hurt our feelings.” He found Community college more veteran-friendly compared to a private four-year college. Greg, “At the community college I was seen as more of an asset to the professors because they obviously respected my time in the service.” Reflecting on the transition from community college to that four-year school he observed, “coming out of community college I’m coming from a community (college) that had over 400 (veterans) you know and now I’m in a school of twelve.” Greg was working at the college he was attending in the veteran’s office to supplement the GI bill resources. Finally, Jake, worked as an EMT which provided money and structure but also motivated him to seek a more sustainable life long career as a doctor.

Social Norms

School culture can both support and be supported by social norms. If students follow those social norms they will have fewer problems with others, especially teachers and administrators, and other societal authorities. Whether it is in or out of the classroom, antisocial behavior can disrupt education. I had at least one student miss weeks of class due to being incarcerated for a parole violation. The men all generally followed social norms and exhibited prosocial behavior. Many social norms help basic survival and support academic success. All six men adhered to laws prohibiting illicit drug use during their college years. Jake and Greg did a fair amount of drinking before his college years, while underage, but seemed able to avoid problem drinking while in college. Tom, “said alcohol affected his academics his senior year but his GPA was high enough to graduate. Dustin is going into law enforcement, “I really fell in love with that, with the law enforcement and the policing side of things.”
Society needs children, but they compete for time and resources needed for school. None of the men had fathered children out of wedlock. Jake was the only father, he said, “My wife is supportive, we have two kids, it’s very hard on her.” It sounds like she does a lot of the work of childcare, freeing him to study and attend classes. He said the children are under four years old and were born after he was married. Jake emphasized that without his spouse’s help his success would not be possible.

I have had to prioritize and manage my time more efficiently. I complete all that is required to be successful and optimize my future (and as a result, my family's future)… My success, while concurrently having children, would not be possible without the full-time support of my wife.

This is an example of how academic success is a team effort, no one can do it alone.

None of the men had negative interactions with police, Dustin wanted to go into law enforcement. All avoided being arrested for criminal behavior and thus none spent time in prison, which affects class attendance and thus academic success. The social norm that encourages some men to enlist in the military had a positive impact for Greg. Greg shared, “My overall goal is….to help motivate other veterans who are struggling with PTSD.”

In his college days, Tom saw some social norms encoded in law as oppressive and felt he had a moral obligation to oppose those unjust drug laws. He references Thomas Jefferson, “Jefferson says a certain degree of civil disobedience is good for a democracy” in the context of justifying drug use by people at a music festival. He resented authority, “That whole authority thing and fear of authority and resentment of authority is based on the fact that I was hurt by the people who were supposed to protect me.” He has since become very prosocial in attitude and
behavior, “I’m very much conservative and I don’t break the law nowadays whereas I had a liberal mindset and I’m actually not as liberal as when I was a kid.”

**Mental Health**

Though some of the men reported struggles with anxiety, depression, and ADHD, they were able to succeed in college. All but one of the men that had those issues found suitable treatment or were able to manage them. Tom was on medication for ADD, “I really wanted to get my grades good…I ended up taking more (Ritalin) than prescribed.” Looking back to his time in high school, Steve recalled, “I did have some pretty significant mental health problems…anxiety, depression.” Steve revealed, “I did have some pretty significant mental health problems, that also were, I had a good amount of anxiety” and “I did actually have major depression and so I, there were times when I couldn’t get out of bed for an extended period (in high school).” Jake self-diagnosed, “I would put money that I had ADHD because now knowing the diagnostic criteria for ADHD at this point” but he believes he grew out of it.

It is not uncommon for a student to have a health issue, miss a number of classes and decide to drop the class and possibly leave school altogether. The only physical health issue mentioned that disrupted education was a broken bone. Connor, “I had to withdraw from a class before it started because I broke my foot.” He was unable to operate his motor vehicle and lacked transport to school. The men seemed to take physical health for granted, none mentioned it as a contributor to their academic success but several talked about mental health issues that were overcome.

**Financial Support**

Jake “you don’t need to have money to go to school like I did this with zero dollars, no one contributed to my education…I never used money as an excuse.” He now has over $200,000
in student debt but will start to be paid $50,000 next year during his internship, and according to Salary.com the average pay for his goal position is $280,000 a year. Most of Jake’s debt came from schooling after community college. Connor had an easier road, “Well my grandfather gave all the grandkids money.”

Most of the other men had some familial monetary support for tuition and room and board though some lived at home. Connor had help from his extended family, my grandfather gave all the grandkids money.” Several had part-time work and most have little or no debt. Going to community college seems to work financially, though some have schedules that are full of work and school demands. Steve was able to focus on his studies because he had a full tuition waiver and also lived in the college dorms, “I studied more because that was the one activity I had to do…being at school all the time, it helped me get stuff done.” At first, Jake did not do well academically in community college, “I don’t even know how many classes I went through, how much of my dad’s money I went through.” Greg used the GI bill, “without the military I couldn’t afford college.” The demands of school and twenty or more hour-per-week jobs, require strong time management skills. Having financial support or finding loans and scholarships was necessary for the men’s success

**Social Supports**

Social supports are relational. They involve informal interactions with peers, parents, role models and fellow students in extra-curricular clubs and activities. Sometimes the men were encouraged, and other times they looked to others as role models and examples of hope and success that they could emulate.
Encouragement

The theme of encouragement seemed to unite input from role models, parents, romantic partners, and peers. This included teachers if the emphasis is more on the relationship than the academics. Encouragement supported the men’s success.

Role models encourage by example. The men had role models, people they knew who succeeded in college. Several attributed some of their success to parental and sibling role models, others to coworkers and friends. The role model theme was strong across participants. Role models provide the men with examples that they can draw hope from believing they also can succeed.

Tom looked up to family and friends, “both my grandfathers, both my grandmothers.” His siblings and several friends went to college; it was a family norm. Steve described his family memories, “I was watching as a kid so in middle school my brother was off in college and so then my sister also you know, then went to university four years ahead of me and took more of a traditional track and so I guess that was sort of the expectation that I would do kind of a similar situation.” In addition to siblings, Steve’s parents were models, “both my parents have college degrees and they actually both have a Ph.D. equivalent too.”

Initially, when asked if he had a role model Jake responded, “A role model? I don’t think I had a real role model that I wanted to be like.” Sometimes the interview process raises awareness and after some further probing questions Jake tells a different story only seconds after he said he did not have a role model,

A doctor befriended me, he was a younger single doctor, and we went out and kind of partied together, but also I worked with him and he would kind of, I guess, he kind of
gave me the encouragement and confidence to pursue what I am doing now, so that he kind of became my role model at that point.

Jake also had parental role models, “My father graduated from professional school. My mom completed partial college.” While his parents laid a foundation of expectations that included college, the young doctor role model pointed Jake toward the medical field.

When asked if he had role models Dustin responded, “Absolutely, my mom basically put herself through…college…and later on in life she went on and got a Master’s degree. My father…took a…similar path, he got his undergraduate and then much later in life he went back and got his Master’s so they are two pretty good models academically.”

Greg initially said he did not have any role models but later in the interview talked about his father’s grit or work ethic. “I think he’s always been a hard worker”, “what I respect about him the most is that he still does things with a sense of pride”, “you gotta admire a person like that.” Then he added this about one of his professors, “my goal is to be to veterans what she was to me.” Interpreting Greg’s description, these people seemed to be his role models, yet Greg did not label them as such. This is an example the IPA double hermeneutic.

Finally, Connor looked to his father as a positive role model, “my father graduated with a Bachelors in Political Science…” However, he then brought up his brother as a negative role model that he did not want to emulate, “My younger brother dropped out and works at a lumber yard for 19 years, he would have a problem if he lost that job.” There are a carrot and a stick in the role model theme. Negative role models can guide positively by avoiding their example.

**Encouragement of peers.** Peers and role models are sometime the same people. Steve was encouraged by peers, “I did have some peers who really helped me, like people who were
older than me, more senior students, who were really good, some of them really helped me a
lot.”

Tom had an encouraging romantic partner, “without her I don’t think I would be
wholeheartedly Christian” and being Christian helped him stay sober which is crucial for
success. As did Jake, “my wife is supportive, we have two kids, it’s very hard on her, my parents
are of course supportive. Yeah, I got a supportive family.”

Jake raised the issue of negative peer influence,

I had to completely sever ties with all those I had hung out with and I moved out of town
and isolated myself. And then at that point, I was able to focus all my attention on
academics and that’s how I was able to, and I essentially had little to no social life on a
regular basis.

Severing ties with friends is a radical choice for Jake and took a great deal of maturity and desire
for his academic goal and future life and family. He was 23 by this time. These friends were
from high school days. They pressured him to party instead of study. Jake recalls, “looking cool
in front of my friends, probably peer approval was an overarching theme.” Jake “most of the
distractions were going out with current my actual friends my age and you know partying on
weekends and stuff like that. I was having a hard time doing both, but I did.” It was a struggle,
but Jake tried to manage it. Tom, on the other hand, chose to pursue the party culture but the
other men seemed to find positive peers or be able to moderate the negative peer pressure.

**Teacher encouragement.** Steve, “the college professors who I had more of a relationship
with certainly helped my progress” and Greg had specific academic encouragement, “every
paper I handed into her, always came back with a little note at the back that said “Can I use this
as a student model? You know, because this is so well done and that’s a real good feeling.”

Having a recognized expert praise your work can be more impactful than a peer’s praise.

**Parental support.** Parental involvement was mixed but generally supportive of education. Parents provided some verbal encouragement and sometimes financial help as well. Homes with at least one financially stable parent. The following is a selection of quotes and descriptions related to parental support. Tom: “My parents are great people, and I love my family.” Steve: “Both my parents have college degrees.” Jake’s parents divorced when he was a young teen. It deeply affected him. They did not have the time or energy to supervise him, and he started skipping school and had some substance abuse issues. His family life had stabilized by the time he got serious about school at age 23. Dustin: “My single mother was stable enough to provide me with everything I needed, and I wasn't forced to work more.” Connor: “Reflecting on my own parents it was kind of alcohol-free, smoking-free environment, and I took that for granted.” None of the parents was incarcerated or deceased, though a few had divorced. R5’s parents did not support his education in any way. Both left high school before graduating and did not dissuade him from leaving as well.

**Extra-Curricular Involvement**

Involvement in extra-curricular clubs and activities is not primarily academic, even though they are associated with schools and do help student grades (Bakoban & Aljarallah, 2015). The relationships that develop in these organizations are a source of support, encouragement, and give students a feeling of belonging and an additional reason to remain in school.

Tom had multiple extra-curricular activities, “a combination of my work as the president of the outdoor club and the recycling committee” that kept him busy and connected his senior
year of college. Tom explains, “I was in … student government, we had a small stipend.” He was entrusted with some responsibility and described it as, “pretty much an honor and get a nod from the President of the college.” Steve recalls, “those connections in the chemistry society and doing that kind of volunteer stuff and being in a little more of a leadership position with the students…was really good experience for my confidence.” Greg helped “to establish an actual veterans club and get a veteran’s lounge” Connor was involved in athletics but his community college did not have any official teams. He was too busy with work to be involved in much else at school but he plans to go another two years so the lack of extra-curricular opportunities is not affecting his progress.

**Conclusion**

There are underlying assumed supports that contribute to and are a minimum requirement for student success. The participants relied on basic physical and mental health, a stable nation with the finances to build and maintain schools, a culture that values education and has relative peace and prosperity. Most take it for granted and are unaware of the cultural and physical environment needed for academic success until it is disrupted with a natural disaster or war, or they travel to places without this necessary socio-political infrastructure.

However, in addition to a fertile socio-political soil and basic physical and mental health, the men needed motivating goals, some Growth mindset, planfulness, self-control, grit, resilience, maturity, agency, some financial resources, positive role models, encouraging peers and social connections at school. It is a complex, interrelated mixture. Some had stronger goals and weaker peer groups, others had more financial support and fewer extra-curricular connections.
The motivating career goals that require higher education appear to be the primary factor for academic success. This career was a sufficient mix of being meaningful, financially rewarding, respected, interesting and achievable. All the other cognitive-emotional, structural, and social supports are necessary but not sufficient for academic success. These factors would support success in any area of life. However, career goals that needed higher education help focus those skills and resources on academics, and lead to academic success.

A college degree erases the stigma of not graduating from high school and the negative life outcomes associated with being a HSNC. Greg made an interesting comment “Now that I have a BA nobody cares that I dropped out of high school”. This is consistent with Heckman’s findings that if an HSNC finishes college he will have the same life outcomes as any high school graduate who also earned a four-year degree (Heckman & Kautz, 2014). For positive financial, health, family, and social outcomes, if you do not finish high school, finish college. However, this appears to be very difficult for the vast majority of HSNCs due to low cognitive-emotional skills, not low intellectual ability.

**Personal Reflection**

My teaching has already been positively impacted by what I have learned researching and conducting this study. In particular, Mindset theory, which encourages me not to give up on struggling students. They can improve with time and effort. Mindset theory also gives hope that students cannot only become smarter but tougher, grittier and more self-controlled. I am impressed with the need for students to develop meaningful, motivating career goals. I sense increased compassion for students with struggles outside the classroom and their need for flexibility in class scheduling and grading. I also am more aware of the need to be proactive in
communicating with students. They may not be willing or able to reach out to an authority figure and advocate for themselves.
Chapter Five: Discussion and Implications for Practice

This IPA (Interpretive Phenomenological Study) looks at the perceptions of successful male college students who previously left high school before earning a diploma. IPA is ideal for this study because it is the perceptions of the men that give them hope, motivation and meaning for their academic work. What do they believe contributed to their success? The theoretical framework is Mindset theory. Mindset theory guided the design of some of the interview questions and at least one theme utilized in the data analysis. It is impossible for a researcher to be value free or theory free (Gearing, 2004; Heidegger, 1927/1962), as revealed in my positionality in chapter three, where I acknowledged the intentional role of Mindset theory in this study.

This chapter will focus on four major themes and a number of subthemes that made meaning of the interview data. The four major themes of what helped the participants succeed in college were: motivating career goals, cognitive-emotional support, structural supports, and social supports. These themes will be situated in the context of the extant literature. The chapter concludes with several recommendations for practice and future research.

**Motivating Career Goals**

Many of the men felt they left high school, not for lack of academic ability, but for lack of motivation among other issues. Professional career goals motivated them to pursue higher education. Of the four factors that contributed to academic success, career goals that require higher education appear to be the primary factor. The men may not have been motivated to enroll in college, much less succeed, if their career goals did not require a college degree. Most, if not all, of the men in this study are classified as millennials, often defined as those born in 1980 through 1996 or so. Most share many of the traits common to millennials (Clifton, 2016; Gallup,
Inc. 2019; Rigoni & Adkins, 2017; Winograd, & Hais, 2014). Adkins (2015) found that about 70% of millennials are disengaged at work and looking for a new job. The same study found that the number one desire was for a chance to grow and develop. Changing jobs does not mean changing careers, but may be one way to advance a career.

All the men in this study had clear career goals that they considered socially responsible and meaningful such as careers in medicine and education. There is a large corpus of literature on motivation and goal setting. A thorough examination of all of this literature is beyond the focus of this study; however, Bandura and Vandenbos (1989), Baron, Mueller and Wolfe (2016), Locke and Latham and (2006, 2002), Ryan and Deci (2000, 2011), and Mason (2010) described the importance of goals and goal setting in relation to achievement and motivation. Bandura and Vandenbos (1989) described the process of self-evaluation and if dissatisfied with progress toward a goal, adjusting motivation and increasing effort to close the gap between the present reality and the desired goal. Mason (2010) found that there is a motivational component underlying employee engagement. A motivated employee is an engaged employee.

The motivating career goal theme organized the following sub-themes: achievable, interesting, relatively well paid, and socially respected. The next section will describe each of these sub-themes in the perceptions of the participants and the literature.

**Meaningful Career**

The men had career goals that they considered meaningful. All the careers had a humanitarian dimension that included social benefit to others. The career goals were to become a doctor, nurse, writer, professor, and university science laboratory coordinator. Several of the men worked at odd jobs and one was an EMT, but they did not see themselves in those positions, as Jake put it, for “the rest of my life”. Seligman (2012) found that having a meaningful career, “a
calling”, is important for life satisfaction. In the preface of a recent Gallop poll report Chairman and CEO Jim Clifton (2016) stated that millennials value purpose over paycheck, they desire meaningful work. Millennials want to do work they feel is contributing to the general good (Winograd, & Hais, 2014, May 28).

**Achievable Career**

An essential element of any motivating goal is that it is achievable (Locke & Latham, 2002, 2006; Baron, Mueller & Wolfe, 2016). The men believed that they could do college-level work. Some had taken a class to test the waters, before officially entering a degree program. Jake had taken a number of community college classes, but was not motivated and as a result did not succeed prior to setting the goal of attending medical school. Locke and Latham (2002, 2006) found that challenging goals produced greater effort than either very low or too difficult goals. This results in higher achievement. Effort increases with difficulty but leveled off or decreased once the goal appeared too difficult to achieve. A person becomes discouraged when the goal is too difficult to achieve. Goals must be attainable and the goal-setter must have sufficient self-efficacy to believe he can reach the goal (Baron, Mueller & Wolfe, 2016).

**Interesting Career**

About 70% percent of millennials are disengaged in their work, more than any other age group, and are looking for worthwhile work (Adkins, 2015; Gallup, Inc. 2019, May 30). A Harvard study found 71% of millennials were disengaged and that they value a career that is interesting more than other age groups and it is one of their top criteria for a career (Rigoni & Adkins, 2017, October 05). This is consistent with the data in this study. The men were not engaged with their current or past jobs and went back to school to prepare for a more interesting and rewarding career.
All the men chose to prepare for what they considered interesting careers. This was in contrast to their current or previous jobs. Jake got bored when things were too easy, he liked a challenge. Tom’s goal of being a professor involved student interaction with new ideas. Tom enjoyed the world of ideas in college and dreamed of sharing that world with others. Dustin has been an EMT (emergency medical technician), but when visiting the hospital saw the emergency room doctor’s work as being equally or more interesting. Not all the men used the word “interesting”, one had a career goal in the medical field that that most would consider interesting. He had been working in maintenance and snow removal to help with finances until he graduates. Jake used “challenging” to describe his career goal. Jake finds working in a university laboratory preparing materials for classes interesting. The laboratories can change from semester to semester. Meeting deadlines, working with potentially dangerous materials, and trying new experiments are interesting tasks. An interesting career may not require a college education, but intellectually challenging careers generally do and all the men had career goals that were interesting and required higher education of some kind. However not all interesting careers pay well, the careers the men sought all had moderate to high income potential.

**Income-Producing Career**

Qualifying for careers with higher income may be the major reason for most of the men to persist in college. Recent studies found that compensation was also a high value for millennials, only slightly behind Baby Boomers (Deloitte, 2016; Rigoni & Adkins, 2017, October 05). These same studies also found that millennials seek career advancement and personal development in their careers, which usually comes with more compensation. College students are paying tuition in the hope of a return on their investment. Jake is graduating with hundreds of thousands of dollars in student debt but it is clear that he believes being a doctor will
provide more than enough income to cover those payments and provided an improved quality of
life for his family. Greg wanted more than a “dead end job.” Steve wanted good pay and
benefits. Jake was dissatisfied with his previous level of income. Dustin worked two part-time
jobs and wanted a single job with better income and a future career path.

Thus an employee would leave a company to improve her career rather than take a new
position in the same company that was a different career path. The men all left previous
employers to advance their desired careers.

Career with Social Respect

Motivating career goals also had to be socially respectable. Every career goal increased
the man’s social status. While an EMT is respected, a doctor is more respected. Repair and snow
removal are respectable honest work for Connor, but being a medical professional such as a
nurse practitioner has a higher status. None of the men sought a career of low status or one that
was not respected. The term found in the literature most closely related to the theme “social
respect” is a combination of “social responsibility” and “acquired social status”. Another term
that is close in meaning is respectability. Social respect in this study is not exactly the same as
status derived from high income or power, but rather the admiration and approval of society for
doing good. Farooq, Rupp, and Farooq (2017) argues that respect is just as important as prestige
or status. Millennials place a high value on social justice (Watts & Miller, 2016). Clifton (2016)
writes “They [millennials] want to work for organizations with a mission and purpose”.
Businesses are responding to consumer and employee desire for social justice (Bhattacharya &
Sen, 2004; Deloitte, 2016; Peretz, 2017; Yuan, Tian & Yu, 2018). Thus a career with some social
respect seemed to be a necessary component of a goal that motivates.
Conclusion on Career Goals

It seems vital to educational success to have a clear career goal in mind. The career goal may be more motivating if it is meaningful, achievable, interesting, produces a good income, and is socially respected. Further research is needed to see how these factors interact to motivate a young man to persevere through years of academic work without financial reward. It appears that if any of the five factors were missing the motivation would suffer. Since all the men had all these components to some degree, it is not possible to answer that question from the data. Motivating goals have the potential of unleashing greater effort, which can increase achievement. If the high achievers have clear goals and the low achievers do not, this could potentially help close the achievement gap or at least keep it from expanding. This deserves more research.

Cognitive-Emotional Supports

This theme went through an evolution as the second major theme under internal supports. Originally it was called socio-emotional, but the social aspect was more external to the students and external supports better organized the rest of the sub-themes. The internal cognitive-emotional skills include a growth mindset, planfulness, maturation, and agency.

Growth Mindset

Studies found that a growth mindset correlates with academic success (Dweck, 2006). It seems reasonable that many students who fail to finish high school but then go on to succeed in college may also have gone through a transition from a fixed mindset to growth. The men in this study were not familiar with Mindset theory. When a growth mindset was explained, the men recognized it in themselves and felt it contributed to their success. All but one of the men seemed to have a growth mindset. This is consistent with the research reported in the literature. Dweck (2017, 2009, 2008, 2006) reports that students with a growth mindset are more successful and
that a student can develop a growth mindset over time with training. Blackwell, Trzesniewski, and Dweck (2006) found a causal relationship between growth mindset and higher grades. Several felt that their mindset was more fixed than growth in high school and that they had evolved. A growth mindset is related to motivation in that it gives hope of success and helps one push through difficult work. This is the optimistic side of a growth mindset; that students can get smarter and achieve at higher and higher levels. A growth mindset can increase motivation by increasing hope of success. This is consistent with the belief that an achievable goal motivates greater effort (Locke & Latham, 2002, 2006; Baron, Mueller & Wolfe, 2016).

Planfulness

The theme planfulness is identical to the psychological concept executive functioning. It is difficult to assess which traits are most important for success, but planfulness or strong executive function is undoubtedly critical to any academic success that requires work and perseverance. High executive functioning has been observed in younger children who were better at academics, including mathematics (Bull, Espy & Wiebe, 2008; Bull & Scerif, 2001). Planfulness is a cognitive skill needed for self-control, grit, and delayed gratification since one must make multiple planful choices for each of those skills. The planfulness theme includes subthemes that also depend on executive functioning: grit, delayed gratification and self-control. The link between executive function and self-control is well documented, children with low executive function exhibit more learning and behavioral problems (Bardikoff, N., & Sabbagh, 2017; Capelatto, Lima, Ciasca & Salgado-Azoni, 2014; Center on the Developing Child, Harvard University. (n.d.); Huguet, Ruiz, Haro & Alda, 2017; Krull, 2003).

Grit. Grit is perseverance toward a long term goal, even in the face of adversity and it is associated with academic success (Duckworth, 2016; Duckworth & Kern, 2011; Duckworth &
Quinn, 2009; Tough, 2012). The men described sticking to their goals and pushing through difficult times. When they understood the definition of grit, they recognized it as a trait they possessed or had developed. Grit can be taught, and thus learned (Willingham, 2016).

**Self-control and grit.** Duckworth, Peterson, Matthews and Kelly (2007) found that Self-control alone is not grit – you need self-control towards a long term goal. This study found that along with self-control, a long term goal was key to academic success. If a student shows self-control but lacks grit, they may need a motivating long term goal. Most of the literature on grit focused more on the moment to moment self-control and assumed a long term goal was already in place. To increase grit for academics there may be a need to develop a motivating long term goal that requires an academic degree. Athletes can have grit with the goal of a championship or a medal but not perform with grit in the classroom.

**Can grit be taught?** Willingham (2016) writes that conscientiousness is better correlated with overall academic success. The student who follows directions and does what is asked earned high grades. Grit is focused on a particular area of passion for a long term goal and thus may help in a particular subject of interest but not all areas. However, if the student’s ultimate career goal requires a college degree then everything required for that degree including general course requirements become meaningful. Yeager et. al (2014) found that students showed more grit on a boring task if they had a personal reason as well as a higher purpose connected to the world, for doing it. When asked if general requirements in college were like those in high school that he did not engage with, Steve said some classes seemed meaningless but “I never lost sight of what I was doing” (the goal of graduating). Willingham (2016) suggest that students need to find their passion. It is interesting in light of the findings of this study that motivating goals are a part of grit. Willingham goes on to note that grit is hard to measure and that looking at the
student’s past accomplishments requiring grit, such as sticking with an extra-curricular for four years, might be a better measure of grit. However, Wolters and Hussain (2015) found that self-regulated learning (SRL) was more closely related to grit and academic success than constancy of interest for a long term goal. The interactions between grit, self-control, and long term goals are complex.

**Delayed gratification.** Delayed gratification requires conscious choices to make plans to put off pleasure and complete less enjoyable tasks first (Baumeister, Schmeichel & Vohs, 2007; Mischel & Ayduk, 2004; Mischel, Ebbesen & Raskoff, 1972). Mischel and Ayduk, (2004) observed that to delay gratification one needed a goal worthy waiting for. The men had goals they considered worth delaying gratification to reach.

Self-control or self-regulation along with goals are needed to delay gratification (Baumeister, Schmeichel & Vohs, 2007). The men delay gratification when they exert self-control and choose to do homework instead of socializing, when they delay investing in a serious romantic relationship or starting a family, and when they delay working full time for more income. Some men leave high school to earn a modest income now instead of waiting for more significant rewards later. Some risk academic failure in high school by working many hours and late shifts and later risk college success by trying to work a full-time job that leaves little time or energy for academics. One of the men in the study experienced the difficulty of having a demanding job while in school. He was on call to snowplow or do repairs at night and would electronically record his class the next day because he was too tired to focus.

Why would men delay the gratification of earning money to enjoy? Some of the men worked while they took classes, but the pay was less than they preferred and the workload was intense. Heckman, Humphries, Lafontaine, and Rodriguez (2008) hypothesize that males without
a diploma might have better paying job opportunities than women without a diploma. Whaley (2017, June 04) hypothesized that male college graduates can get employment that usually pays more than women with the same education, thus they could pay off their debt sooner. However, he interviewed a young male high school graduate who said the fear of $150,000 of college debt was deterring him from seeking a college degree.

The choice to delay gratification is rewarded by even higher pay for more satisfying work which better supports a family. The family may be different if the college graduate marries a college graduate. The household income will be much higher since college graduates are more likely to have a higher income. The culture of the home may pass on cognitive-emotional skills that support academics. They can afford to live in a more affluent area with more real-estate appreciation. Their children will probably go to school with other children from college-educated parents and their chances for repeating the wealth cycle is high. The long term financial and social gains for the family become much greater than some estimate, especially in a time when wages are stagnating for the working-class and increasing for the college graduates.

**Self-control.** Closely related to delayed gratification was self-control, a skill that allows a person to stay on task and avoid distractions. Duckworth, Taxer, Eskreis-Winkler, Galla, and Gross (2019) found that self-control and academic success are correlated. The planful subthemes of self-control and self-discipline are also consistent with Self-determination theory (Deci & Ryan, 2000, 2011). Self-control and self-regulation are virtually identical (Baumeister, Schmeichel & Vohs, 2007). The individual chooses to delay immediate pleasure or gratification for a higher goal. Deci and Ryan found that students can be successful when internally motivated and self-directed. The individual makes choices based on internal goals and needs. The men in this study were mostly self-directed. Their parents were supportive or neutral but did not push or
control them. Some men lived with parents at least part-time and some received some financial support, but most of the parents let the men make their own decisions. Many of the parents had tried to direct the men but gave up and allowed them to leave school. This may have allowed the men to develop internal or intrinsic motivation which is more effective than external controls (Deci & Ryan, 2000, 2011; Ryan & Deci, 2000). The small number of men located for this study and who are successful HSNCs is consistent with data that shows that most HSNCs do not succeed in college or life in general (Heckman, Humphries & Kautz, Eds. 2014). Thus, while a hands-off approach worked for these men, it apparently has not worked for millions of others. This brings us to the theme of maturity.

**Maturity**

Maturity levels varied for the men. Some were nearly forty years old and others in their early twenties. They all expressed an awareness that they had matured due to life experiences and chronological age. Some showed a great deal of maturity in their early twenties and others less so until their late thirties. There is research indicating that the frontal lobe does not mature until the early twenties (Johnson, Blum, & Giedd, 2009). This may have been the case for most of these men. Life experiences, such as being in the military and work-world, seemed to make them more resilient to difficult times in school. In contrast to real life, school was easier.

**Agency**

Agency is related to efficacy and freewill (Bandura & Vandenbos, 1989; Bandura, 1977). Bandura and Vandenbos (1989) theorize that people can generate novel ideas that can impact their environment which in turn impacts the authors of those ideas. The successful men in this study set career goals and made choices to achieve those goals, they were the authors of new life directions (Locke & Latham, 2002, 2006; Baron, Mueller & Wolfe, 2016). This freewill exercise
of person agency to set goals and pursue them changed their environment and ultimately, their lives. They chose to delay gratification and consciously made plans. All the men but one exhibited high levels of agency. The one who did not, blamed others for difficulties in his life and only recently has taken more personal responsibility, resulting in turning his life around after years of alcohol addiction. The most important factors contributing to academic success appear to be high levels of cognitive-emotional skills such as grit, self-control and self-discipline (Duckworth & Seligman, 2005; Heckman, Humphries & Kautz, 2014). These traits all utilize personal agency.

**Conclusion for Cognitive-Emotional Supports**

The literature and my findings concur that cognitive-emotional skills are even more important than academic skills for academic success. Skills such as self-control and grit will help the student gain the academic skills needed, whereas the reverse is not true. Without these cognitive-emotional skills even the most intelligent and talented student will struggle and could fail. Fortunately, cognitive-emotional skills can be learned and developed at any age, though the ideal time is from birth through early elementary school age. This is an area that the student can experience agency and choose to take control even if he has not done so in the past. He can reject a victim mentality and move forward in life.

**Structural Supports**

Structural supports are external to the men, yet affect their lives. They are part of the environment within which the men live. There may be some structures the men can change but many are beyond their control.
Academic Flexibility

Schools and teachers that are adaptable and able to change in order to meet student needs are more conducive to academic success. This may mean flexible due dates on assignments, or convenient class. Teachers can offer a menu of assignments from which the student may choose. Many students work full time and have family responsibilities. Night and weekend classes are more conducive to the schedules of those who work typical eight to five shifts or have childcare responsibilities. Students with school age children prefer daytime classes, but if they have infants and preschoolers, they need to have family help with children whenever they have a class. This is an example of how additional financial support could help students and indirectly support colleges and ultimately society. None of the men had children while in undergraduate school.

One in particular appreciated online classes because he had two jobs.

Employment

This theme is not primarily about the money that is covered under the financial supports theme. Work (civilian and military) taught life skills and responsibility that carried over to school. These are some of the life skills high school graduates already have such as being on time and dealing with difficult authority figures. Finally, employment helped motivate the men to find better careers that were more interesting, paid better, were more meaningful and socially respected than the ones they were currently in.

Social Norms

Social norms keep the men safe and societies stable. Social norms vary from culture to culture and change over the years. All the men avoided marijuana, illicit drugs and alcohol abuse except Tom. Tom became addicted to alcohol at the end of his time in college career and it did not prevent him from graduating. The men in this study not only benefited personally from
following social norms themselves but also from those around them following prosocial norms in the society at large. Studies find that students with more social capital including social norms, are more likely to graduate (Coleman, 1988; Wenk, Anyon, Michelli & Spring, 2011). A study comparing behavioral records with academic found that poor behavior often preceded poor academics but not vice versa (McIntosh, Chard, Boland & Horner, 2006). Some of the men conflicted with authorities in their high school years but none did in their college years.

**Mental Health**

Mental Health is foundational to any success in school or the workplace. Depression can lead to becoming a HSNC (Dupéré, Dion, Nault-Brière, Archambault, Leventhal, & Lesage, 2018). The men did not have to be free from mental health issues as long as they are getting treatment to manage them. Several of the men may have suffered from ADD (Attention Deficit Disorder). While some received a diagnosis and treatment, others were able to compensate and manage their mental health issues without treatment. Many men of similar intellectual ability who do not manage mental health issues would find academic success beyond reach. The criteria for this study is to be a successful student; thus those who are selected would have sufficient mental health for success. Several of the men shared about mental health conditions during high school and college such as anxiety or ADD.

**Financial Supports**

All the men were surviving financially, some with parental support, others, full time work, and several had scholarships and loans. This does not mean there is no need for more financial support. The group of men are exceptionally gritty and hardworking. Jake (the most successful student) has about $200,000 in student loans, but that includes medical school. Community colleges like RCC, have numerous financial aid programs and scholarships. The
president shared in an August 20, 2019 email, that interviews with students who were accepted but never enrolled revealed that most did not go anywhere and financial considerations were the main deterrent. The president went on to wonder if RCC can do a better job informing prospective students of the financial aid available.

A recent Pell Institution study reports that tuition costs have risen and financial aid has lagged behind, resulting students working more or leaving school (Cahalan, Perna, Yamashita, Wright & Santillan, 2018). Community college students tend to be more disadvantaged economically and their parents less able to help (Choitz & Reimherr, 2013).

For each of these six men there are probably dozens or even hundreds of HSNCs for whom financial support may have helped and prevented them from leaving high school or college. The bottom line is that society benefits economically from the contributions of high school and college graduates and pays dearly for the failures of HSNCs (Belfield & Levin, 2007). It appears short-sighted not to invest in education. Investing in preschool and preventing HSNCs could have the highest return (Heckman, Pinto & Savelyev, 2013; Heckman, Moon, Pinto, Savelyev & Yavitz 2010c).

**A Global Perspective**

When the concept of free education and its benefits are extrapolated globally, the economic, social, political and environmental benefits could be immense. Imagine free education for all in the developing world and the human capital it could develop. When the men in this study were asked how their lives might be different had they been born in a developing country with few resources, most recognized that they might not be in their present good situation. The relative poor in the developed world have far more resources than the poorest third of the human race in absolute poverty. Most would be considered middle class in many other nations. The men
in this study greatly benefitted from the basic medical care, roads, transportation, housing, employment opportunities, affordable community colleges, as well as scholarships. This structural support is not common in many developing nations, especially to the poorest in those nations. I specifically asked three of the men if their lives would be different if they had been born into a poor family in India. Dustin realized his choices would be more limited but was helped by a single mother even though it was a financial struggle. Dustin felt being white might have prevented others from looking down on him for being a HSNC. Greg noted the economic success of Indian immigrants and felt his parents were poor in comparison. Connor felt his economic status was a disadvantage, too poor for private school but too well off for his parents to send him to public school, so he was homeschooled which he felt was the worst option. When asked if being a minority would have made a difference Connor felt it might have been a disadvantage in the south, but not up north where he lived. The men were more aware of their hard work and some of the barriers they faced, not the basic support being born in America gives. They did not seem to think that they were particularly privileged by being American or white. They did not mention issues related to poverty and race until I asked.

**Conclusion for structural supports**

The men exist in an environment that provides relatively more opportunities than constraints when compared to peers globally. They benefited from a number of structural supports. The successful men were all born into a supportive environment for education to varying degrees. This environment included structural support for mental and physical health, a stable pro-educational society, educated parents who were pro-higher education, flexible school schedules and teachers, and sufficient financial resources to succeed in college. The literature
reveals that this is not the norm for a large number of men, especially those who are HSNCs (Cahalan, Perna, Yamashita, Wright & Santillan, 2018; Choitz & Reimherr, 2013).

**Social supports**

The social supports category includes the contributions of the people surrounding the young men. Three types of social encouragement emerged, role models, parental support and peer support. A fourth area, extra-curricular, gave more of a sense of belonging as opposed to encouragement thus is included under social rather than structural supports. All four recognize the role of people in the men’s lives.

**Encouragement**

A number of people gave the men encouragement, often explicit verbal statements that increased the men’s beliefs that they could succeed. Humans are social creatures and often see themselves through others eyes and value the opinions of parents, teachers, and peers. These same people could have discouraged the men and endangered their success. They may not have succeeded without this encouragement.

**Parental support.** The men had parents who were generally supportive, some even helped financially and with housing. Not all the men in the study came from two parent homes but they all had positive parental and/or grandparental role models. Parents support the development of the men for the first years of life with vocabulary, health, food, enriched environments, and protection. Even the average working-class family provides financial and intellectual supports not available to children with poor, illiterate parents that I studied in Haiti (Mason, 1990) and the rest of the developing world.

Most of the men had male parental or grandparental role models. Popenoe (1999) correlates an inability to delay gratification with fatherless homes. He lists some problems that
result, they include increased out-of-wedlock births, substance abuse, academic failure, crime, and general delinquency. Forty years before Popenoe’s research, and over a decade before his famous marshmallow experiment (Mischel, Ebbesen, & Raskoff, 1972), Mischel (1958, 1961) did a similar experiment that correlated fathers in the home with higher self-control in their children. Kidd, Palmeri, and Aslin (2013) found that children from more stable and predictable environments had more self-control and success in general.

**Role models.** The men often had role models that they could identify with or compare their abilities to. Several observed role models in the workplace. This either encouraged them because they felt they also could do what the role models were doing, or motivated them to be like their role model someday, even if it would take years. Bandura (2001) developed the Social Cognitive Theory that placed a great importance on positive role models for developing youth. Men in prison had negative father role models (Jaffee, Moffitt, Caspi & Taylor, 2003) and are more likely to come from a fatherless home (Popenoe, 1999).

**Peer support.** Just as family members can be role models, so too can peers. People the men look to for social support beyond biological family members are peers. Peers may be friends, romantic partners, fellow workers or geographic neighbors. Jake chose positive peers and avoided others that were a negative influence. Tom might have done better if he had been more deliberate in his choice of friends in college. A friend of Connor said to him “you should quit and just go get a trade job” but he chose not to take that advice. The men chose peers to spend time with or listen to. Social Cognitive Theory (Bandura, 2001) supports the importance of peers and role models in developing the person’s identity and beliefs about what is possible in life. According to Social Cognitive Theory people observe a behavior or action and its consequences and learn to emulate what they observe in order to achieve the same results.
Conclusion on Themes

This study looks at the perceptions of successful male college students who had previously not completed high school. To what did they attribute their success? The answer is an ecology of themes from internal ones like motivation, clear career goal setting, grit and self-control, to external ones such as school, family and peer support. Financial support varied from relatives or scholarships paying for almost everything including housing to taking out loans and working full time while taking classes. Heckman and Kautz (2014) found that HSNCs who pass a HSET have as much intelligence as any high school graduate. The participants fit that description intellectually and also had sufficient mental and physical health to succeed in college. However, beyond intellectual ability, there were several key cognitive-emotional skills needed for success: strong planfulness which includes self-control, grit (perseverance towards a long term goal), an ability to delay gratification, a basic level of maturity, and agency (a belief that they could succeed).

All of these factors contributed to their success, yet they would contribute to success in almost any endeavor. As indicated in chapter one, these men are the exception to the rule that HSNCs never attend college or if they do they leave in the first semester (Heckman, Humphries & Kautz, 2014). The unique factor they all shared that was specific for academic success in college was a meaningful, interesting, socially responsible, income-producing, achievable career goal that required a college degree. The final aspect of the career goal, requiring a college degree, may be the key element needed to motivate academic success. These conclusions can be applied to educational practice in a number of ways.
Recommendations for Practice

The information in this study supports a number of proposals that could improve education and increase student success.

Cognitive-Emotional Training

Develop or find and promote training on cognitive–emotional skills that can be used by teachers, youth clubs, summer camps, parents and even prison personnel. Develop a training slide show or video that can be used in classes or a public service announcement for television on the basic ideas of growth mindset with practical suggestions for application. Partner with the media department or film study at Northeastern University. It could be integrated with an incoming freshman orientation. Contact those in charge of those programs and present this idea. Evaluate the existing orientation program and suggest ways to include career and Growth mindset training. Cognitive-emotional skill training is more important than academic skills for life (Seider, 2012). The academic achievement will follow if self-regulation is strong.

The training slide show or video can be incorporated into existing preparation classes for HSET (high school equivalency tests) preparation classes. The present practice of teaching academic skills and testing for content knowledge is not preparing students for the other half of college life: the cognitive-emotional Students need the skills of grit, and self-control. The training would include Growth mindset training. It can address negative fixed mindset self-talk and replace it with positive growth mindset beliefs that things can get better, that people can get smarter. Role play how to combat fixed mindset messages making the right choices for success.

Growth mindset principles can close achievement gaps for minority students. Fixed mindsets are more common among the disadvantaged (Dweck, 2008) and students of color are
more likely to experience poverty than their white counterparts. Dweck (2008) found that a growth mindset improved math and science achievement for all, but especially for females and minorities. This should help close achievement gaps. Bennett (2018) advocates using growth mindset practices to close the achievement gap. Yeager et al. (2016) did a study testing online growth mindset training and found it can reduce D and F grades for high schoolers. Rattan, Savani, Chugh, and Dweck (2015) report that growth mindset interventions reduce the achievement gap for minorities at a low cost. They also identified a belonging mindset that works with a growth mindset to improve achievement.

**Effort matters.** Hsin and Xie (2014) found that Asian American and white students started school roughly equal, but after a number of years, Asian descent students, especially those with first generation parents, progressed faster, resulting in an achievement gap between Asian Americans and white students. They attributed this gap not to innate intelligence, but to greater student effort due to high parental involvement and pressure.

**Focus on what the student can control.** I teach every class about growth mindset principles and how effort and use of the brain can increase intelligence. This will put them on an equal mindset footing with high achievers who often already have a growth mindset (Zeng, Hou, & Peng, 2016; Dweck, 2006). Intentionally teach and practice cognitive-emotional skills. These skills are so foundational to academic, economic and social success that they should be part of the curriculum from an early age.

**Develop a cognitive-emotional assessment.** Colleges need to know if a student has grit and other skills needed to survive four years of school. Students need to know this as well before they take out loans and go into debt. This would go along with cognitive-emotional training in that you would need to assess the student before and after training.
Career Goal Formation

This study has informed me about themes or components of a motivating career goal. Forming a motivating career goal that requires an academic degree is key to academic success. I volunteer to speak to first year college students about careers. I teach many first-year students in college. I survey them about careers and I can be more intentional about coaching them, especially ones who are undecided or vague about their goals.

Developing a motivating long term goal seems to be teachable at all levels from early elementary through college. When assessing grit, Duckworth (2011) asks if the student changes goals and if they do, associates that with lower grit even if the student may be high on self-control. Duckworth and Kern also studied measures of self-control (2011) but self-control alone is not grit, long term goals are needed. This seems to be a point of intervention that would not require years of cognitive-emotional development. Focus on the student’s career goals. Give the student a career interest survey and then research the suggested careers. This could be done in a matter of hours and would be valuable to do at least annually from middle elementary through high school years. Each semester can start with students making connections between their career goal and every class they take. This can help avoid the common problem of students not being motivated in general requirement classes. Aim high with career goals, president, doctor, astronaut, especially in the lower grades. Motivating career goals help students engage in school. They can be modified as the years pass. We should not discourage an average young student with a goal of becoming a doctor, when Mindset theory tells us their potential could be much higher than we think.
Career goal-setting could be part of the HSET (High school equivalency test) training. There are existing online career interest surveys and career income predictors Research income potential (Carnevale & Cheah, 2015, 2013). Students would benefit from interest and personality inventories related to career goals. They can fill in a career decision matrix to help clarify which goals are highest for them. In addition, I can find or develop a tool for assessing passion for a long term goals.

As people move to a smaller carbon footprint they will buy less, consume less and thus need to earn less. This frees them to consider a wider range of careers, many which may be more satisfying, fit their personalities, and are more significant and have better work-life balance than the six and seven figure positions. Encourage student to consider income potential last in their search for a career goal. This may empower and support women if the males in their lives have better work-life balance and can better share child rearing responsibilities. This can free women to invest more time in their careers.

There is declining enrollment at RCC and many others across the nation. College marketing could emphasize career possibilities requiring a college degree. Use the elements from this study of the motivating career goals such as ones that are meaningful, achievable, interesting, have high social respect, and good income to design the advertisements for the college.

**Teacher Flexibility**

In staff meetings and teacher trainings encourage flexibility with students. Students with jobs and families appreciate flexible teachers. Emergencies may make a student late on an assignment. I recommend being flexible on the due dates when students have issues preventing them from getting their work in. Some teachers point to the syllabus and remind students that
they knew the due date months ago and could have prepared early. That is not flexible, it leaves the student with negative feelings. The lowest grade can be dropped; late work can be assessed a small penalty so it does not destroy the student’s average. One of the men was hurt by a ridged teacher who would not accept his work because it was late. Do not grade on attendance or penalize students if they arrive late or need to leave early for family or job. If they miss an audiovisual send them a link to a similar video if possible or have it available in the library or online. If it is a laboratory try to take photos of the materials and short video clips so they can experience as much as possible. Have a makeup time where they can demonstrate skills such as using the microscope. Give an alternative assignment or send or make available a copy of any instructions. This is also a place to drop one grade in the category of laboratories.

Formative grades should have less weight than summative. For example, homework assignments that lead up to an exam can be waived if the student does well on the exam in the same content. Assign paper due dates early in the semester to allow for some time for emergencies. Arrange to have student presentations done across two or more days so if a student misses one, they can present on the other. Never have a major presentation due on the last day of class when it cannot be made up. The final exam can be taken as an alternate time or an alternate final take home form can be offered as a replacement grade. The take home exam can be more difficult than the in class version. Even with all this flexibility built into a course there will be students who are injured or sick and this is when an incomplete grade is given rather than an F giving the student time to make up work. If the students are learning, the educational goal is achieved. Is it the role of the teacher to be teaching business deadlines? They can be taught but should be a secondary aim of the class. People reviewing the student’s grades assume they reflect
knowledge not a behavior grade. Behavior will affect the grade indirectly, no need to make the grade depend heavily on whether a student meets and artificial deadline.

**Conclusion on recommendations for practice.** Much can be done to support academic success. Mindset theory informs educational practice by giving hope that every student can grow smarter. We must invest more time on task with focused development of cognitive-emotional skills. Front loading the cognitive-emotional skill training in the early grades will make the academic work more efficient and productive in the higher grades where the content is more complex and more crucial for college acceptance and success. Encourage teachers to be flexible with assignments and provide individualized alternatives that achieve the same learning goals. Encourage schools to have multiple paths to graduation and flexible schedules to meet the needs of working students. We must spend time guiding students in developing clear motivating career goals that require a college degree. Finally, HSET training should include explicit teaching about the need for cognitive-emotional skills, such as grit, and career goal clarification for college success.

**Recommendations for Future Research**

Based on the conclusions and recommendations for practice, several areas for future research were identified. Mindset theory sheds new light on some stubborn problems in education including HSNC, student motivation, and behavior. In addition, the findings that highlighted the importance of career goals and cognitive-emotional skills revealed areas of needed research.
Cognitive-Emotional Skill Research

Duckworth and Yeager (2015) write of the need for more research on measures of grit and other socio-emotional skills or traits needed for life. If they can be more accurately measured, then maybe they can be developed. How can colleges measure grit of applicants in order to predict academic success? Can secondary schools assess grit and help students grow in this area? This research is needed to develop valid cognitive-emotional assessments. Are there proxies that stand in for grit, such as playing four years of a sport or sticking with the band all through high school? Kelly, D. R., Matthews, M. D., & Bartone, P. T. (2014) found that participation in high school athletics could be used along with standardized test scores, and a grit measure to predict success a West Point. They used the 12 question self-assessment for grit developed by Duckworth et. al (2007) and found it predictive when combined with other measures. Elumaro (2016) also used the 12 question self-assessment and found a connection between grit and a high level of athletic accomplishment but did not find any correlation with personality traits and athletic accomplishment. This needs further testing a development according to Duckworth and Yeager (2015).

Grit development training. Assess levels of grit. Duckworth and Quinn (2009) created and tested the validity of a short grit scale of only twelve questions. Three of the six questions under the heading consistency of interest related to changing and new interests. They did not use the word goal. They associated changes in interest with lower grit. If better goals can increase consistency of interest long term in a career that requires college education grit for academic success may increase. Willingham (2016) writes that we do not know how to teach children to be gritty. However, if we can teach some of the components of grit such as self-control or
persistence, and passion for a long term goal, it seems reasonable that we can increase a student’s grit.

One aspect of grit that needs clarification and research is the role of beliefs. Duckworth and Yeager (2015) wonder if using the word skills for socio-emotional skills overlooks the role of student beliefs prosocial values and relational concepts like trust. How do beliefs affect grit. Does the student believe the goal is worthwhile? Do they have metaphysical beliefs that support or hinder success such as destiny or fatalism, values or ethical reasons for sticking to a difficult task? Are there beliefs that correlate positively or negatively with student success? Tom gained a great deal of strength from his religious beliefs for his recovery from alcoholism and felt that if he had them back in college he might have avoided the party scene that contributed to his addiction. Jake believed in what he called Karma, that if he worked hard the universe is fair and good things would happen. Connor struggled with the organized religion of his parents and does not feel it plays a role in his academic success but he carries many of their values and morals. I could not find any literature on religion and Mindset theory. Religious beliefs (whether organized or secular, theistic or atheistic) go to the core of an individual’s thinking and may help or hinder the student’s mindset. We need more research on transcendent or metaphysical beliefs and grit.

**Mindset Theory and Education**

**Mindset theory and the achievement gap.** There is a potential downside to the brain research Mindset theory is based on that I have not seen talked about in the literature directly. Mindset theory could explain the achievement gaps. If the brain creates more connections with use, do some students arrive in kindergarten with billions more connections than others? These connections hold words and concepts in one’s memory and allow faster processing of new ideas.
Some students may enter school with as much as a 30 million-word deficit (Hart, & Risley, 1995) and thus far fewer neural connections. In a longitudinal study of almost 8,000 children, Morgan, Farkas, Hillemeier, and Maczuga (2016) found that achievement gaps in science can be found in general knowledge in kindergarten and will still exist in eighth grade science classes and possibly beyond, though the study ended there. This is concerning since so many challenges facing the human race today are related to science. How can growth mindset best increase scientific and mathematical thinking?

How can those with fewer connections catch up when those with more connections also continue to get smarter and at a faster pace? This is no reason to give up, one does not want to fall further behind and ideally equal effort should result in equal progress to reach one’s potential from this point forward. However, it would take extra time and effort to catch up. It seems better to approach this problem with a growth mindset mentality that says children can get smarter rather than from a traditional fixed intelligence perspective that locks low achieving students into an underachieving destiny. We need more research on what types of focused practice help students catch up. What types of practice or effort increases cognitive ability faster? Is vocabulary the silver bullet or is it focused mathematics practice?

High achievers are more likely to have a growth mindset than underachievers (Dweck, 2006), therefore, teaching growth mindset principles will put everyone on a level mindset playing field. If underachieving students do not develop a growth mindset, will the gap increase? We need research on the achievement gap and if and how it correlates with Mindset theory. A common questions raised concerning Mindset theory is, “Are there limits to what some students can learn and do?” Is it even fair to tell a student they can do and be anything they want if they
try hard enough? This area needs further research but this study tells me to encourage students to aim high.

**How can Mindset theory best help students catch up?** How can growth mindset principles and essential concepts in education help English language learners and at risk students catch up and close the achievement and knowledge gaps? The men in this study were all white suburban students. They experienced academic failure due to cognitive-emotional issues more than socio-political inequities. Through hard work, grit, self-discipline, and strong motivation these students made up for the lost years of education. Can this work for others? A student does not need to know everything to be good in a specialty.

Can we diagnose the strengths and weaknesses of students and develop individualized plans that remediate areas of weakness while also developing strengths? Are there specific areas we can focus on to fill in the knowledge and skill gaps? The great African American Olympian Wilma Rudolf overcame polio that affected her legs to become a world champion runner (Oliver, 2014). Is there a way to develop a curriculum that gets the essential knowledge in less time, similar to focused exercises on specific muscle groups?

Hirsch (1983) proposed the need for a common knowledge base, not just vocabulary, in order to better teach English language learners. Words are based in concepts, and cultural context and if the concepts and context are not understood, the words are not understood. Hirsch (1987) wrote *Cultural Literacy: What Every American Needs to Know*, as a dictionary of cultural concepts initially for English language acquisition. His original article on the concept had a goal of helping adult English language learners succeed (Hirsch, 1985). Hirsch has been criticized for being ethnocentric as if his was *the* definitive list of what constitutes true cultural knowledge. Later versions of his book include more multicultural knowledge of other cultures (Hirsch, Kett
Can we develop a global cultural literacy that includes but goes beyond American cultural literacy that can unite the world through a shared understanding?

**Goal Formation**

How can students create motivating career goals? Will they increase achievement? If goals were so important to the success of all the men in this study, it is worth further study in educational settings. What goals inspire students? How can each student buy into a motivating career goal that includes a college degree? Does it help to visit workplaces, see careers in video online, bring in speakers from different careers, or put posters up of successful college graduates or spend focused time visualizing a career?

The exact mix of the five criteria for a motivating goal may differ for each student. Are some of the criteria less important, or do they compete and conflict? For example, would high income-potential outweigh the other four criteria; achievable, interesting, socially respectable, and meaningful? Does social respect increase or decrease with income-potential? Does a meaningful career take the primary position for more idealistic men? Is there synergy between some of the criteria, such as socially responsible and meaningful? It is better to have a goal that changes than no goal at all when it comes to education? It seems that grades could be correlated with a survey tool that measured the clarity and strength of a student’s career goals. The formation of motivating goals deserves more research. How does goal clarity relate to grit? For a list of additional research areas and questions see Appendix F.

**Conclusion on Further Research**

The research in the literature supports the idea that the best way to reduce achievement gaps between ethnic or economic groups is to intervene from birth to kindergarten and during summers. We need more research on particular interventions that address the achievement gap.
Will concentrating on teaching growth mindset principles and focus on domain specific skills and knowledge best help those in the lower twenty-five percent academically? What are the skills and content that wealthier students have that economically disadvantaged students can be taught? There is need for more research on goal formation and its connection to grit and academic success. How do the different components of a motivating career goal interact? How can we use growth mindset, grit, socioemotional skills and goal formation to maximize human potential to make every community and ultimately the whole human race flourish?
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Governance Studies The Brookings Institution


Appendix A: Letter to participants

Dear Student,
I am a graduate student in the college of professional studies at Northeastern University, Boston, Massachusetts. I am writing to ask your help in my current research. I have a strong research interest in understanding the success of male college students who did not complete high school but passed equivalency tests to qualify for college.

If you are interested in participating in this study please contact me at 978-312-1914 or Mason.rob@husky.neu.edu and I will send you a consent form and further explain the purpose of the study and procedures for participating. Any interviews I conduct will be conducted ethically, which gives you the right to withdraw at any time and for your identity to remain confidential, with the use of a pseudonym.

Thank you in advance for your time and consideration.

Sincerely,
R Paul Mason
EdD Candidate
Northeastern University at Boston, MA
Appendix B: Consent Form

Northeastern University’s College of Professional Studies, Boston, MA
Consent Form Version Date: ______
Title of Study: Successful Second Chances
Principal Investigator: R Paul Mason
Northeastern Department: College of Professional Studies (CPS) - Curriculum, Teaching, Learning, and Leadership (CTLL) concentration
Faculty Advisor: Dr. Joseph McNabb
E-mail: j.mcnabb@northeastern.edu

Study Contact telephone number: 978-312-1914
Study Contact e-mail: dafna.gan@gmail.com
Request to Participate in a Research Study

You are cordially invited to participate in a research study on successful male college students.

You were selected as a potential subject because you are attending RCC after previously not completing high school. If you decide to be involved this study, you will be one of several participants in this research. Before agreeing to participate, we ask that you read this form carefully.

The study is being conducted by R. Paul Mason, Doctoral Candidate in Educational Leadership at Northeastern University, Boston. This study is conducted under the supervision of Dr. Joseph McNabb (his title here).

The purpose of this research is to better understand and describe your understanding of your academic success.

There is no known danger or risk to you for participating in this research, in fact there may be a real benefit as we gain increased awareness and understanding of the source of your success which can help you maintain it and help others reach similar goals. I guarantee that your responses will be kept fully confidential; all audiotapes or digital recordings of interviews will be kept in secure locations or on password protected devices and destroyed following analysis and transcription. This study is designed to obtain new knowledge. I will offer you the opportunity to review the transcript of the interview and to request that any of your contributions be withheld from analysis.

Participating in this interview and research is entirely voluntary. You can refuse to answer any question and may withdraw from the research at any time. If you withdraw, nothing you have shared will be used in the study, and all record of your participation will be destroyed.

Specifically, I am seeking your consent for the following:

Documentation: I would like your permission to be interviewed: I would like you to participate in a semi-structured interview, which I will record and transcribe. The interview takes about 60
minutes and will take place in your school or a place of your choice. The interview will consist of a few questions to gain general information about your background and your beliefs about why you are succeeding in college. I may look at your academic records from RCC and which High school equivalency tests such as the HiSET or GED you took and passed.

I guarantee that those records and your responses will be kept fully confidential through the use of pseudonyms and password protected files and will only be used for this research. Your names and identifying material such as names of friends or schools or locations that come up in our conversations will be changed to protect your identity. Any reports or publications based on this research will not identify you or any individual as being of this research. The site where you study will also be referred to using a pseudonym only. Participants’ names will be changed as will any identifying details revealed in the interviews. My focus on this research is on successful male students who formerly did not complete high school.

Exception to confidentiality:
I am a mandatory reporter for child abuse to the Massachusetts Department of Children and Families (DCF) if during our interviews I have reason to believe a child is currently being neglected or abused I am required to report it.

Finally, your review of my interpretations of research data, particularly as it represents your perspective, is critical to the validity of my research. At the end of the interviews, I will ask you to review findings and conclusions and ask for your verification of my interpretations to assure their validity and trustworthiness. I will do my best to limit the time required of you, but your corroboration of my findings will be very valuable to the quality of this study.

Please let me know if you have any questions or concerns about participating in this research. You may contact me at: mason.rob@husky.neu.edu or 978-312-1914.

If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: irb@neu.edu. You may call anonymously if you wish.

I truly appreciate your participation. Thank you very much!

R Paul Mason
Appendix C: Theoretical frameworks familiar to this researcher

Perna and Thomas (2006) advise using a variety of theoretical perspectives to analyze educational data to achieve a thicker, richer understanding. They can be introduced part way through to test emerging themes. Smith, Flowers and Larkin (2009) also suggest using theories in the later stages of data analysis.

Layers of influence. Perna and Thomas (2006) created a conceptual model of the layers of influence on students’ college success (see fig.2).

![FIGURE 2
Proposed Conceptual Model of Student Success](image-url)
From Perna and Thomas (2006)

Perna and Thomas (2006) organized four contextual layers of impact or influence on a student’s life into a nested model. Reading the model from the outer layer in closely parallels the organization of the literature review for this dissertation. The researcher is familiar with the following theories listed below and has found them to have explanatory power in previous data analysis. Acknowledging this awareness and deliberately trying to look for contradicting data will reduce bias in the study. The theories below are organized on a continuum from the external sociological-political and economic influences to the internal psycho-emotional. Themes for data analysis may be consistent with some of these.

Layer 4: social, economic and policy context

Economic theories (Sabanayagam & Shankar, 2012; Oreopoulos & Petronijevic, 2013) codes:
- Cost of college
- Economic return Benefit of college
- Career goals
- Economic status
- Financial security
- Class theories

Social context:
- Critical Theories
- Resisting reproduction of class
- Oppression of working class by middle or upper class
- Romantic prospects, or lack thereof
  - Romance across class lines influences decision
- Oppositional Culture theory
  - Self-defeating
  - Constructive
- Social Cognitive theory (Bandura, 2001) guided codes:
  - Male role models:
    - positive /negative
    - in secondary school
    - other college students
- Cultural Reproduction theory (Bourdieu, 2011; Willis, 1977) codes:
Emulates parents/grandparents/peers/teachers

Policy context:
Federal and state aid
Building community college capacity for more students

Layer 3: school context
RCC policies on retention,
aid,
grading,
tutoring

Layer 2: family context
Parental support
Partner support
Single parent issues
Sibling role models

Layer 1: internal context
Well-being/happiness theories (Seligman & Csikszentmihalyi, 2000)
Learning to help the world, family, community
Positive emotions
Reducing depression

Cognitive choice theory codes:
Self Determination theory (Deci & Ryan, 2011)
Self-confidence, self-esteem
Positive/high
Negative/low
Self determination
Self-control and grit
Delayed gratification issues
Long-term goals

Hedonic Theory (Higgins, 2006) codes
Money for maximizing pleasure
Instant gratification
Romantic distractions, or motivations
Chemical (drugs, alcohol) distractions
Socializing vs studies

Fixed and growth mindsets (Dweck, 2006)
Optimism
Grit (Duckworth)

Locus of control
Internal
External

Motivation
Intrinsic
Extrinsic and internalized extrinsic (Ryan & Deci, 2000)
Appendix D: Pool of tentative follow-up questions:

- What did your parents and other family members tell you about college or school in general?
- What did your peers in high school say about college, and what do they say now?
- Describe someone you admire who has done what you are doing, a role model.
- How did financial issues such as the cost of college or need for more income impact your motivation to do well in college?
- What religious or spiritual beliefs and values play a part in your decision?
- What do you believe about fate, God or feelings that this was meant to be
- Where there interactions with teachers influenced your view of college negatively or positively?
- Did your high school and does your college GPA accurately reflect your academic ability? Why or why not?
- What other interests distracted you from school and affected your grades and motivation to study?
- How do you view the cost/benefit of college?
- How have you changed since high school?
- What changed in your thinking from high school? How do you see yourself differently?
- How did the realities of life and the work world impact your decision?
- What was your career goal in high school and what is your present career goal? How/why did that change?
- How would you evaluate your IQ?
- Do you like a challenge? What about school interests you?
• How do you feel when you fail at something?

• In what ways have your abilities changed allowing you to succeed in college?

• Do you feel you are getting smarter? If so in what ways?

• Have your views changed during this interview? In what ways?

• What programs or training have helped you succeed in college?

• Is there a particular idea that keeps you going when you face challenges?

• What school, community, family and social supports helped?

• What helps you through difficult times?
Appendix E:

Participant recruitment

After IRB approval at Northeastern and the target institution I searched for participants for five months and was only able to find six who would participate. I put up posters where permitted, put a notice in the school newsletter, connected with all the offices that worked with veterans, students of color, at risk students, the adult learning center and contacted all my professional and personal friends on Facebook and LinkedIn. I also used personal phone numbers and texted almost all (about 200) of my former college students for leads but none knew men fitting the description. I offered a twenty-five-dollar gift as a “thank you” for participating. The twenty-five with a dollar symbol was in large red type in the hope of attracting someone to look closer read the fine print. The posters themselves were limited in size by the school’s IRB to eight by eleven paper. The majority of students at the target school are female but they may know men who fit the description. Two of the six men turned the gift down. I wanted to offer enough to justify taking up to two hours of their time. The fact that two of the six turned the gift down may indicate that the difficulty in finding men was not due to the size of the reward offered. A few men called or texted me but then realized that they did not meet the criteria, usually because they had a high school diploma. One of the participants had a diploma but he received it after he had left high school before graduation and had started college and was able to use the college coursework for high school credit.

I understand the need to protect participants but found the restrictions on how to contact prospective participants unnecessarily restrictive, especially considering the potential benefit to the school and its students. I could not post notices anywhere but a few restricted bulletin boards and only 2 or 3 of the hundreds of phone number tabs were ever taken. My first round of posters were placed with permission on a few permitted locations just before the end of the summer session let out but when I checked back they had been removed so I may have lost a month of time. I asked why they were taken down and found it was a mistake and I was allowed to post them again. I was not permitted to contact former students via school email or to send a school wide notice via school email. As a result, most of the participants I found had attended and graduated or transferred from schools other than the target institution. This too limited the potential benefit to the target college and its students.
Appendix F: Additional research areas and questions

How can schools be more flexible in teaching and delivery of content as well as structuring and scheduling of classes?

Online and hybrids are more flexible than traditional face to face classes. Do they support HSNCs better than traditional forms of content delivery?

Do HSNCs need more structure than online courses have?

How can online courses maximize accountability to support less self-disciplined students?

What is the relationship of peer encouragement and intrinsic motivation? Which motivate HSNCs better?

Does group work online provide sufficient accountability and motivation to help HSNCs stay on task? Is it better than present methods in the classroom?

Do HSNCs do better with immediate feedback provided by electronic or other polling devices used in class? My experience with polling devices is that allow me to find out immediately if concepts are understood by the class. They allow the quiet and less confident students to have a voice and contribute to the class.

Would polling devices be good for middle and high school where peer pressure and fear of peer disapproval is especially high?

Does giving students a voice, through polling devices, help in retention?

What careers motivate college success? How can they be marketed to HSNCs to motivate them to return for more education?

Is a motivating career goal necessarily meaningful?
Can goal formation better harness human will power, especially for those with low self-control?

What methods of teaching can increase self-control and grit?

How can schools rely less on or accommodate for low student self-control and grit?

If a diploma is a signal to employers that the graduate has high cognitive-emotional skills – not just high levels of knowledge and thinking skills, how can we teach those skills?

How effective are present programs that prepare students for HSETs?

What cognitive-emotional training can be added to GED and other HSET trainings to better prepare students from success in college?

Can cognitive-emotional skill be tested and used as a factor in college acceptance?

How can HSNCs gain more cognitive-emotional skill?

Can growth mindset training of teachers in college impact college students?

Can growth mindset training of students increase their capacity to learn and succeed?

Can the number of neural connections be quantified without harming the brain?

Does simply explaining what a growth mindset is to participants help shift their mindset from fixed to growth?

Will free or debt-free education for all help? How will it be paid for? Free high school does not prevent HSNCn, but paying students did reduce HSNCn in some cases.

Will free education pay for itself in higher taxes later?

Will free education pay for itself simply by averting climate change since the more educated believe it is real and vote differently?

Will free education pay for itself by producing more researchers and inventors who may find solutions to costly problems like climate change or cancer?
Is debt free education helpful in attracting and retaining students?

Does debt free education impact males or females more? Many of my community college students are single mothers retooling to care for their families after a divorce.

The GI bill has requirements for GPA in order to continue. Would similar requirements or incentives work for free higher education? Will free higher education run into the same problem free secondary education has with HSNCs? Is a free education appreciated less?

Should we pay high school students minimum wage? Teachers often tell their students that school is their job and their grades are payment. High school is partially job training and preparation for the workforce, though much more.

Generally, students do not brag about their community college the way students in schools with nationally ranked teams do. Is there research justifying the expenditure on college athletics from an academic perspective of student attraction and retention?

Are division one college athletic programs a positive or negative influence on the academics of the school? Can we justify lifelong injuries in football, especially brain injuries, in the name of education?

More research is needed on the effect of divisive politics on working-class male students and veterans who may feel marginalized in a more politically progressive or liberal leaning college.

Is the Me-too movement affecting the enrollment of males in college? The majority of students in community colleges are women. How can we make colleges more male friendly?

How can we encourage women to go into all areas of academics and jobs without discouraging males to do the same or to feel neglected and overlooked?
Appendix G: Terms used in this paper

HSNC vs dropout – Pushout or pushed out has been used in a recent documentary https://www.youtube.com/watch?v=2Kse-llLZ0k dropping out is personal choice – pushout is when the school encourages a student to leave to help school statistics look better because they are truant or have poor academic or behavior records but have not been expelled (https://en.wikipedia.org/wiki/Pushout)

The terms social and emotional or socio-emotional has become more widely used since its introduction in the 1990’s (Merrell & Gueldner, 2010). However non-cognitive does not fit as cognition is used for these skills. Skills is not always applicable since many beliefs influence behavior. Cognitive skills? Soft skills? see Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. Educational Researcher, 44(4), 237-251.