Finishing on-time: A qualitative examination of contributors to timely undergraduate degree completion

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Finishing on-time: A qualitative examination of contributors to timely undergraduate degree completion

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy
Public Policy and Administration
Virginia Commonwealth University

by

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Richmond, Virginia
April, 2013
Dedication

This work is dedicated to my beloved parents Shadwell and Hyacinth Spence who did everything they could to ensure that their children had what they did not—the preparation and the opportunity to achieve their educational goals.
Acknowledgement

When I was very young, my father made me memorize the following poem by American poet Henry Wadsworth Longfellow (1807-1882)—

“The heights by great men reached and kept were not attained by sudden flight, but they while their companions slept, were toiling upward in the night.”

He sought to inspire me to continue to work hard to achieve my goals even when I felt I could do no more. He succeeded. I have often thought of that poem as I have worked to complete this dissertation. But what the poem fails to capture is the contributions of the many individuals that supported, encouraged, and inspired me as I ‘toiled through the night’. I take this opportunity to acknowledge and thank those individuals for their contribution to the completion of this work and my journey as a doctoral student.

First, I would like to thank my wonderful husband, Tim Vermaaten, whose love, kindness, patience, and unconditional support lifted me up and kept me moving along the path of this very long journey.

Second, I would like to thank my dissertation committee, Dr. William Bosher, Jr., Dr. Lisa Abrams, Dr. Richard Huff, and Dr. Farrah Graham. Their keen insight and gentle direction helped ensure the quality of this work. I continue to be inspired by their collective scholarship.

Third, I would like to thank my dear sister, Nicole Spence-Goon, my wonderful aunt, Gloria Forbes-Compton, and my friends Lucritia Mizelle, Tosha Robinson, and Joice Conyers. Their cheerleading at various milestones of my doctoral journey helped to encourage me regardless of the challenges or diversions that appeared along the way.
Fourth, I would like to thank Diane Stout-Brown of Virginia Commonwealth University’s Alumni Association and Lori-Floyd Miller of Virginia Commonwealth University’s Graduate School for their invaluable assistance.

And finally, I would like to thank God, my beloved spiritual teachers, and my spiritual family. They are the wind beneath my wings and the guiding forces of my life.
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Abstract

FINISHING ON-TIME: A QUALITATIVE EXAMINATION OF CONTRIBUTORS TO TIMELY UNDERGRADUATE DEGREE COMPLETION

By Diane A. Vermaaten, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Public Policy and Administration, Virginia Commonwealth University.

Virginia Commonwealth University, 2013

Director: Dr. William Bosher, Jr., Distinguished Professor of Public Policy and Education

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The purpose of this study was to determine the most significant factors that contributed to on-time undergraduate degree completion. On-time degree completion requires that a student complete all the requirements of their degree within 4.5 years or less. A grounded theory methodology was used to conduct the study. Narrative data was collected through semi-structured interviews.

Thirty former students who completed their undergraduate degree at Virginia Commonwealth University were recruited for this study. To be eligible for the study, participants had to have completed their undergraduate degree in 4.5 years or less and graduated between 2004 and 2011.

The analysis of the narrative data determined that preparation for on-time completion begins in high school and continues throughout a student’s college career.
First, high school students who develop ‘academic self-esteem’ by participating in an honors courses or an early college credit program in high school enter college with the belief, or personal vision, that they can complete their degree in 4 years. However, in cases where the student matriculates without ‘academic self-esteem’ directed and intensive institutional support is an effective proxy.

Next, a student must be self-motivated or determined to complete on-time. They must have an inherent reason for wanting to reach that goal post. However, since the findings indicated that motivation can be internal, external, or both, institutional support can be used as effective tool to develop these qualities where needed.

Third, if students are to complete their undergraduate degrees on-time, they must develop a personal plan for accomplishing that goal at the very beginning of their college careers. This plan should be incorporated into the student’s academic advising sessions and updated as they acquire the credits required for the completion of their degree.

And finally, students should be strongly encouraged to engage in campus life by participating student clubs, organizations, and/or athletics. Participation in campus life encourages persistence and therefore supports on-time completion.
CHAPTER 1 - INTRODUCTION

Timely undergraduate degree completion has become a financially challenging issue for both the state and students of Virginia. For the freshman cohorts of first-time full-time students entering all Virginia public institutions between 1992 and 2004, on average, less than 50% of those students completed their undergraduate degrees within 4 years (SCHEV, 2011). A challenge of that extended time to undergraduate graduation is the cost of the student’s education. For every additional semester that a student takes to complete their degree, the student will be required to pay tuition and mandatory fees thereby increasing the personal cost of their education.

What is less obvious is the fact that the state is also paying a financial price for each additional semester the student attends a public university. In Virginia, the state pays from the general fund approximately 50% of a student’s true cost of education which includes both the educational and general costs generated by an institution to educate their in-state student population (SCHEV, 2009). This sharing of the cost of an in-state student’s education by the state is known as the fund-split and it has been part of Virginia statute for more than 30 years.

In 1976, Virginia’s general assembly adopted a plan—referred to as the fund-split—to share every Virginia public higher education institution’s true cost of educating in-state students. The 1976 plan called for the state to pay 70% of the cost of education from the general fund while the student would pay the remaining 30% of the cost as tuition and mandatory fees i.e. the nongeneral fund (SCHEV, 2009). The state adopted the 70/30 fund-split plan based in part on the findings of the 1973 Carnegie Commission which determined that a state receives measurable and important social and economic benefits when the state’s workforce completes a post-
secondary education credential (SCHEV, 2009). The state has only reached the 70% target once (1981-82) and the state support target was subsequently lowered to 67% for the state and 33% for the students in 2004 by the Joint Subcommittee on Higher Education Funding Policy (SCHEV, 2009). Since then, a combination of budget cuts and tuition increases has led to an estimated cost-share ratio of 52% for the state and 48% for students for fiscal year 2013 (SCHEV, 2012). Out-of-state students are required to pay at least 100% of their cost of education.

The state therefore has a vested interest in students completing their degrees in a timely manner because of the financial ramifications of extended time to graduation when you consider the full cost of a student’s education. Further, given the additional costs that a student incurs for every additional semester they delay graduation, students should have a vested interest in finishing their degrees on-time as well.

While there is a body of literature that identifies the completion challenges faced by students who fail to complete on-time such as financial challenges, family crises, part-time or full-time work, there appears to be a gap in the literature that speaks directly to the experience of the students who manage to complete their degrees on-time. This study seeks to make a very small step towards filling that gap with the hope that an outline or template for on-time completion from the students’ perspective will emerge to guide policy makers, educators, and future students.

One tool that currently plays a prominent role in the discussion of on-time college completion and therefore must be addressed in this study is credit-based transition programs for high school students also known as early college credit programs. These programs include the
Advanced Placement Program, the International Baccalaureate Diploma, the Cambridge Advanced Examinations and Dual Enrollment.

In general, early college credit programs were developed with the intention of easing the transition and accelerating the passage of high-achieving students from high school into college (Fowler & Luna, 2009). These programs enable high school students to take college courses and earn college credit while in high school. The 1972 Project Advance at Syracuse University is thought to be the earliest credit-based transition program to be documented (Fowler & Luna, 2009). The program was an initiative between local high school principals, superintendents and university staff directed at high school seniors, many of whom had completed the requirements for graduation by the end of the 11th grade (Fowler & Luna, 2009). Since then, early college credit programs have flourished across the country.

These programs are entrenched in Virginia’s educational landscape. Section 23-9.2.3.8 of the Code of Virginia instructs the governing boards of each of the Commonwealth’s public higher education institutions to implement policies to grant undergraduate course credit to entering freshman students who have taken one or more International Baccalaureate (IB), Advanced Placement (AP), or Cambridge Advanced (A/AS) Examinations and to make those policies available to the public on the institution’s website (Virg. Leg. Code). Further, in 2006, Virginia’s P-16 Council recommended that the Department of Education increase the proportion of students successfully completing AP, IB, or dual enrollment courses from 17% in 2005 to 25% by 2010.

Of all the early college credit programs, the AP program is one of the most popular and most widely available. The program provides high school students with the opportunity to earn college credits while completing their high school diploma by offering courses that are taught on the high school campus by qualified teachers. The courses follow a prescribed curriculum developed
by the College Board and require a standardized exam at the end of the course (College Board, 2013). The AP program has grown exponentially since it began as a pilot program in 1951. In 1960, approximately 10,000 examinations were administered nationally. In 2012, total exams taken in U.S. public schools by graduating seniors was 2.9 million (College Board, 2013).

The College Board which administers the end of course examinations, states that students who participate in AP courses are more likely to graduate from college in four years at a rate of 62% higher than students who did not participate in AP courses (Hargrove, Godin, & Dodd, 2008). Further, since students who pass their AP exam with a qualifying grade may be eligible for college credit depending on the policy of the university they attend, the College Board claims that AP participants can expect to save on the cost of college as these students would have fewer courses for which they would be required to pay tuition (College Board, 2009).

As AP and all the other early college credit programs continue to grow, it is important to determine the role these programs play in on-time degree completion. However, this study sought to uncover not just the contribution of early college credits programs but to determine any other contributors that play a significant role in helping students to graduate on-time. A qualitative methodology was chosen for this inquiry in an effort to capture a first-person account of what it takes to complete a degree on-time from a sample of students who did just that.

**Purpose of the Study**

There are a number of unanswered questions on the efficacy of early college credit programs as the most effective tool for on-time completion (IES, 2009). Further, there is a lack of successful AP exam completion and therefore no ability to earn college credit by many of Virginia’s students. The course enrollment and exam completion data indicate that many Virginia students are either not taking the exam at the end of their AP course or are not achieving
a qualifying score for college credit when they do take the exam (College Board, 2010). As a result, this may be an opportune time for the public policy supporting the expansion of these programs as a college completion tool to be revisited. It may be that the public funds spent on early college credit programs may need to be redirected to or shared with other as yet undistinguished contributors to on-time undergraduate graduation. To that end, the purpose of this qualitative study was to determine the most significant factors that contributed to on-time completion from the student’s perspective.

By utilizing the perspective of students who completed their undergraduate degree on-time, this qualitative study sought to determine the most important factors that contributed to graduation within 4 years for full-time students who entered a 4-year institution within 6 months of their high school graduation. While other studies on student graduation have used wider parameters for measuring graduation rates such as 5, 6, and even 8 years, this study focuses on students who completed their 4-year degree in 4.5 years or less as not only is that the official timeframe of on-time completion, it is also the most cost effective time-frame for both students and the state for full-time study. The longer a student takes to complete their undergraduate degree, the more cost of the degree increases for both the student and the state. With limited financial resources available to both state and the student, uncovering contributors that enable students to graduate on-time could provide important financial savings for both students and the state.

The study approached the students’ experiences from two distinct time periods of influence—high school and college. Including the participants’ experiences prior to entering college should provide for the possibility that some students entered their college experience
equipped with powerful influences to complete their undergraduate degree in a 4-year time frame.

**Research Questions**

This study sought to determine the most significant contributors to timely undergraduate graduation from the perspective of students who successfully complete their undergraduate degree within 4.5 years or less. To that end, the research questions for the study were: 1) what are the most significant factors that determined on-time graduation for students; 2) are there specific steps that students take during their high school and/or college careers to ensure on-time graduation for their undergraduate degree; and 3) what contribution, if any, does participation in an early college credit program make to on-time graduation for first-time, full-time (FTFT) students. With regard to research question #3, while there may be other intrinsic benefits that students gain from participating in early college credit programs, this study sought to isolate the impact of early college credits on timely graduation by determining if those credits were utilized towards a student’s degree completion requirements.

**Significance of the Study**

There are important public policy implications generated by students failing to complete their undergraduate degrees in a timely manner that ensure the significance of this study.

First, the longer a full-time student takes to complete their degree, the higher the cost of education for both the state and the student. Since per-student state funding for four-year institutions declined by approximately 18% between 1992 and 2010 in Virginia (SCHEV, 2009), extending their time to graduation could substantially increase the cost of a degree for students and their families. Further, since the state shares a portion of the full cost of a student’s
education, the financial burden also increases for the state the longer a student takes to complete their degree assuming continued full-time attendance.

Second, the growing number of students failing to either take or achieve a qualifying score on the AP exam at the end of each course they take calls into question the rationale for continued expansion of the AP program as a completion tool in light of the financial investment required on the part of Virginia’s schools, school divisions, and the state. Although there are some federal grants available to support school divisions in their AP incentive initiatives, the price tag can be quite substantial. For example, in an attempt to encourage greater student participation in the AP program, approximately half of the 132 school divisions in Virginia that offer the AP program, pay the $86 exam fee for students to take the AP exam at the end of their course (Cirillo, 2010). In 2008, one of the larger school divisions is Virginia paid the fee for its students to write 2,900 AP exams at a cost of more than $240,000.

Funding is also an ongoing issue for the dual enrollment program in Virginia. Critics have argued that because the state provides credit funding for both the public schools—in terms of average daily membership credits, and the community colleges—in terms of full-time equivalent credits (FTE), the dual enrollment program in effect ‘double-dips’ into the state treasury (Catron, 2001). However, the developers of the Virginia Plan contend that the ‘double-dip’ funding structure provided the necessary incentives for participation by both the public schools and the colleges (Catron, 2001). Unlike the exam fee required from students taking AP courses, the Virginia Plan encouraged schools and colleges to provide the dual enrollment courses at no cost to the high school students and their families; however it was not a requirement giving individual colleges the flexibility to set up their own agreements with their school districts (Catron, 2001).
In seeking to determine if there are other more relevant contributors that led to on-time undergraduate degree completion, this study may help to illuminate avenues beyond early college credit programs that should be considered for increased financial investment.

And finally, the findings of this study have the potential to illuminate core processes for colleges seeking to increase their effectiveness. As recently as 2011, the state passed legislation—the 2011 Virginia Higher Education Opportunity Act (the Act)—that makes clear to the Commonwealth’s public colleges that among other priorities, greater effectiveness as it relates to timely graduation is needed. The Act requires all institutions to prepare six-year plans that forecast the performance of the institutions over the next six years on a variety of measures and the funding needed to meet their goals. One of the performance measures included in the six-year plans is timely degree completion. Provisions have been made within the legislation for the Governor—with the approval of the General Assembly, to provide economic incentives to institutions that successfully increase degree completion in a timely manner.

Definitions

There are several terms utilized in this study that require clarification for ease of understanding:

*First-time Full-time (FTFT)* student refers to what is usually described as the traditional student. The traditional student refers to the student who entered college as a full-time student after within six months of graduating from high school.

*Timely graduation* refers to students who completed their undergraduate degree in four years for the purposes of this study.

*On-time graduation* is used synonymously with timely graduation for the purposes of this study and denotes completion of an undergraduate degree within 4.5 years or less.
College/University refers to four-year public higher education institutions for the purposes of this study.

The state refers to the state of Virginia for the purposes of this study.
CHAPTER 2 - REVIEW OF THE LITERATURE

The Advanced Placement Program in Virginia

The nationwide rapid expansion of the AP program over the past forty years has been reflected in the expansion of the program in the Commonwealth. Advanced Placement program participation in high school has been promoted as an effective contributor to on-time or early college graduation in Virginia. It has also been incorporated into public policy in Virginia. In reviewing data on AP participation in Virginia provided by the College Board it was determined that in 1969 there were 1,195 students from 81 schools participating in the program. That year, 1,498 examinations were attempted by Virginia students. Forty years later in 2009, 63,563 Virginia students from 413 schools in the Commonwealth participated in AP courses. Those students took 115,063 AP course exams.

In 2010, the Virginia Department of Education announced that Virginia had been recognized by the College Board for achieving the nation’s largest five-year increase in student achievement on AP examinations (VADOE, 2010). To qualify for that title, the percentage of Virginia public high school seniors earning a passing grade of 3, 4, or 5 on at least one AP exam had increased by more percentage points since 2004 than any other state in the country. Scoring at least a 3 is required for students hoping to receive college credit for their AP course.

While the five-year improvement in test scores seems impressive, the driving force behind the improvement may be a matter of arithmetic rather than improved instruction. In 2004, there were only 39,464 Virginia students taking AP courses. In 2009, five years later, that figure
almost doubled to 63,563 students taking AP courses. So rather than increasing student achievement on qualifying exam grades of 3 or higher, student achievement as a percentage of total participation remained essentially the same—31% in 2004 to 29% in 2009.

The fact that approximately 70% of the students participating in the AP program are ineligible to receive college credit and thereby unable to decrease the time to graduation presents a challenge to the efficacy and relevance of the AP program in light of the program’s stated objectives and the state policies surrounding the program. It also suggests that there are other relevant contributors to on-time graduation since some non-AP participating students do manage to complete their undergraduate degree on-time.

**The Advanced Placement Program and Academic Achievement in College**

In their research, Hargrove, Godin, & Dodd, (2008) found that the GPAs of students who participated in AP courses and took the AP exam for the course exceeded the GPAs of all other students. However, other researchers have suggested that their may be factors other than AP participation that contributed to the academic achievement of these students.

For example, Smith & Zhang (2009) determined that some students possessed what they referred to as an ‘academic ethic’. This academic ethic encompasses certain habits of the student’s mind as well as learned behaviors that contributed to a student’s success in the first semester of college. According to the researchers, this ‘academic ethic’ was demonstrated by certain students who made their academic studies a priority above leisure activities. Students with the academic ethic studied on a daily or near-daily basis. Further, the way in which these students studied could be characterized as intense, serious, and disciplined.

The Smith & Zhang (2009) study focused on students at Georgia Southern University, a Carnegie doctoral-research university with an enrollment of approximately 15,000 undergraduate
students and 2,000 graduate students. The researchers administered an in-class survey during the first week of the 2007 spring semester to students enrolled in 11 sections of Introduction to Sociology. The course was chosen because it contained a cross-section of first-year students. Out of a population of 775 students, 657 completed the survey for an 84% response rate. The researchers utilized the survey data gathered from the first year students (n = 335), because they represented the most recent high school graduates and would therefore be likely to have better recall of their experiences and behaviors. While the first-year student cohort represented a convenience sample, the researchers felt the cohort closely mirrored the first-year student population at Georgia Southern University. Two hundred and sixty-five of the 335 first-year students fully answered all of the questions on the survey.

Smith & Zhang’s data analysis revealed that students who possessed an academic ethic in high school earned higher GPAs during their first semester of college than students who did not possess an academic ethic in high school, thus facilitating a smoother transition to college.

But while Smith & Zhang’s (2009) findings suggest that there may be other factors such as an ‘academic ethic’ that contribute to student academic achievement, their research does not negate the potential contributions of AP participation as they did not include AP course taking as a variable in their study. Further, Adelman (1999) suggests that the academic ethic that Smith & Zhang identified in their research is developed in part by participation in challenging coursework such as AP classes during high school.

A study by Bleske-Rechek, Lubinski, & Benbow (2004) found that students who did participate in the AP program more frequently expressed satisfaction with the intellectual caliber of their high school experience when compared with students who did not participate in the AP program. The research problem of the Bleske-Rechek et al. study was to determine the impact of
the AP program for intellectually gifted students and the potential implications of recent changes surrounding the AP program such as the rapid expansion to a wider population. To that end, their study focused solely on intellectually talented students—the original target group of the AP program.

Bleske-Rechek et al. (2004) drew participants from the five cohorts of the Study of Mathematically Precocious Youth’s (SMPY) planned 50-year longitudinal investigation of intellectual talent. The participants were identified in 1972 at age 12 and 13 by Scholastic Assessment Test (SAT) scores indicating that they represented the top 1% in ability. Information on AP involvement was secured at the age-18 follow-up.

Bleske-Recheck et al. found that the overall picture of intellectually talented youth is one of young men and women who have an intense need for intellectual growth and who are invested in their intellectual development. They state that because this talented group of students possesses distinct learning preferences from their typical counterparts, they require a differentiated curriculum such as the AP program. Further they found that AP opportunities appear to facilitate the positive development of highly motivated students who learn at rapid rates.

Regarding the expansion of the AP program to accommodate a broader population of high school students, Bleske-Rechek et al. (2004) determined that there was potential for harmful effects on students at both ends of the ability spectrum. They state that proponents of the AP program expansion seem naively optimistic in responding to concerns about recent declines in AP exam pass rates when they suggest that even students who failed AP tests gained considerable confidence and knowledge from the experience (Bleske-Rechek et al., 2004).
Further complicating efforts to determine the best use and efficacy of AP program participation are the findings by Thompson and Rust (2007). When comparing the academic performance of college students that participated in AP courses in high school to college students that did not participate in AP courses, Thompson & Rust (2007) found that while AP students rated their high school AP courses better than their high school general education courses, AP participating students did not earn significantly higher college GPAs than high-achieving non-AP students.

To collect their data, Thompson and Rust (2007) administered a questionnaire to forty-one students from a southern, regional, state-supported university. All participants were required to have a 3.0 college GPA or to be enrolled in the University Honors College or the Psychology Pre-Graduate program. Participants were required to answer the questionnaire at a computer station which permitted easy access to college transcripts. Although the study had limitations such as a small sample size, the results are still intriguing as the findings seem to suggest that talented students succeed regardless of whether or not they participate in the AP program.

**Dual Enrollment in Virginia**

Dual enrollment programs are early college credit programs built on partnerships between high schools and colleges (Collins, 2012). Students can earn college credit only or both high school and college credits, by completing college courses while concurrently enrolled in high school. The courses may be taught by college professors or high school teachers certified by the college as adjunct faculty (Collins, 2012). Students take these courses by a variety of means—on a college campus; at their high school; online; or at some specified location (Collins). Like AP, most dual enrollment programs were established to provide motivated high school students with a more challenging curriculum (Collins, 2012).
In Virginia, dual enrollment programs were formally established in 1988 with the introduction of the Virginia Plan for Dual Enrollment (Virginia Plan), a document governing the partnership agreements between public schools and community colleges in Virginia (Catron, 2001). The agreement was the outcome of the work of a task force on dual enrollment which included representatives from both public instruction and the Virginia Community College System (VCCS).

An interesting feature of the plan is that while it outlines basic parameters for dual enrollment program offerings, it does not serve as an official policy as the VCCS delegates authority for the implementation of the plan to each of its 23 community colleges (Catron, 2001). Governor Mark Warner expanded the program further in 2005 when he advocated for a more efficient use of the high school senior year to increase college enrollment and attainment (Wathington, Pretlow, Finnegan & Bagreev, 2012). Governor Warner’s expansion ensured that dual enrollment courses would be offered at all high schools in the Commonwealth and that certain courses would be accepted for credit at almost all colleges in the state (Wathington et al., 2012).

The impetus for the establishment of dual enrollment in Virginia appears to be an outcome of an increased emphasis on articulation between public schools and colleges during the 1980s (Catron, 2001). At that time, schools and colleges sought to establish agreed-upon curricula that permitted students to complete two years of a vocational degree in high school and the subsequent two years of the degree at a community college (Catron, 2001). The original goal of the programs was to serve the “average” student who might desire some education beyond high school but were unlikely to pursue a bachelor’s degree. As the programs developed, the scope of the courses offered expanded as high school administrators sought to take advantage of
the advanced courses already in place at the community colleges by offering them to a broader range of high school students who could take advantage of getting a head start on their college degrees (Catron, 2001). At the time it was believed that “not only did sharing resources make sense financially, but it also helped to eliminate the unnecessary duplication of courses for students who had often been required to take very similar courses in both their high school and college programs (Catron, 2001).”

Initially, it was expected that vocational courses would be the most popular but academic courses that were eligible for college credit transfer quickly became the most prevalent among the dual enrollment offerings (Catron, 2001). In terms of eligibility for taking the courses—which have to be a part of a degree, certificate, or diploma program, students were required to be a qualified high school junior or senior who was sixteen or older (Catron, 2001).

While the initial quality of these courses faced criticism and therefore problems with transferability to other institutions, increased efforts in assessing the programs have contributed to the transferability of dual enrollment credits to most public 4-year institutions in Virginia. Other early college credit programs such as the Advanced Placement (AP) program, the International Baccalaureate (IB) program, and the Cambridge Advanced International Certificate of Education (AICE), follow a curriculum set by their sponsoring organizations that requires students to succeed on nationally standardized exams in order for them to earn college credits.

The dual enrollment program in Virginia continues to experience rapid expansion as more students take advantage of the opportunity to earn college credit while in high school at relatively little expense. In 2003, 10,348 Virginia high school students participated in a dual enrollment program (Wathington, Pretlow, Finnegan & Bagreev, 2012). By 2011, the number of
Virginia high school students participating in a dual enrollment program increased to 16,901, a 63% increase in participation in 8 years (Wathington et al., 2012).

A National Perspective on Dual Enrollment

In its most recent report on dual enrollment, the National Center for Education Statistics (NCES) found that during the 2010-11 academic year, 46% of all 2-year and 4-year Title IV eligible degree granting postsecondary institutions reported high school students taking courses for college credit within a dual enrollment program (Marken, Gray, Lewis, 2013). A large majority of these institutions (83%) reported that the courses were taught at the college campus however, 64% reported that their courses were taught at the high school campus (Marken et al., 2013). Only 48% reported that their courses were taught through distance education (Marken et al., 2013). In instances where the courses were offered on high school campuses, 45% of the institutions reported that the courses were taught by both high school teachers and college instructors while 34% indicated that those courses were taught by high school teachers only, and 21% reported that the courses were taught by college instructors only.

Forty-four percent of the institutions reported that students typically took only one course per academic term, however 18% reported that the typical pattern was two courses per academic term (Marken et al., 2013). Eighty-five percent of the institutions reported that the course curriculum was the same for both the dual enrollment program students and the regular college students (Marken et al., 2013).

International Baccalaureate

The International Baccalaureate (IB) Diploma is another early college credit program available to high-achieving high school students that has strong participation in Virginia. The IB Diploma program was developed by the International Baccalaureate, a non-profit educational
foundation. While students are able to access the AP program and the dual enrollment program on a course by course basis, the IB diploma program is a selective program within a high school to which students are usually admitted in their junior year of high school. There are only 36 high schools in Virginia that offer the IB Diploma program.

The IB Diploma program is just one of four programs offered by the organization. Founded in 1968, the organization works with 3,557 schools in 144 countries to develop and offer programs to over 1,090,000 students aged 3 to 19 years. The goal of the IB Diploma program is to expose students to a challenging college-level curriculum in the last two years of high school in order to prepare them for success in higher education (Peters & Mann, 2009). Most colleges and universities have high regard for the IB diploma program and consider it to be superior preparation for the academic challenges of postsecondary education (SCHEV, 2013).

High school students who complete the IB Diploma have the potential to earn college credits without having to take courses from a college or university (Peters & Mann, 2009). The assessment for the IB Diploma appears to be fairly rigorous. The IB website, www.ibo.org, provides the following information on assessment:

Students take written examinations at the end of the program, which are marked by external IB examiners. Students also complete assessment tasks in the school, which are either initially marked by teachers and then moderated by external moderators or sent directly to external examiners. The marks awarded for each course range from 1 (lowest) to 7 (highest). The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance across the whole program and to satisfactory participation in the creativity, action, service requirement.

Despite the apparent rigor of the IB Diploma program, participating students have no guarantee that they will earn college credit for their coursework as each higher education institution is at liberty to determine credit equivalency.
**Cambridge International Examinations**

The Cambridge International Examinations provide an alternative opportunity for high school students to earn early college credits. The Cambridge Advanced International Certificate of Education (AICE) Diploma offers students access to courses that are considered equivalent to freshman college courses. The AICE diploma is administered and assessed by the University of Cambridge-International Examinations, a non-profit department of the University of Cambridge in the United Kingdom.

The AICE curriculum provides access to more than 50 subjects from 3 curriculum areas: Mathematics and Sciences, Languages, and Arts, and Humanities. Most subjects may be studied at either the Cambridge International Advanced (A) Level or at the Cambridge International Advanced Subsidiary (AS) Level (www.cie.org.uk). In general, A Level examinations require 2 years (360 hours) of study in a subject while AS Level examinations require 1 year (180 hours) of study and covers the first year of the 2–year A Level syllabus. Students are allowed to choose specific subjects and levels of study for each subject.

In order to complete the AICE diploma curriculum, student must complete 6 subjects and take the examinations for each with at least one course and examination being from each of the three subject areas. However, students are able to choose their level of study—A Level or AS Level.

As is the case for Advanced Placement, Dual Enrollment, and the International Baccalaureate, higher education institutions set their own equivalency standards. At VCU, the A Level syllabuses and exams are estimated to cover approximately two years of college-level curriculum in a subject. Cambridge tests passed with a grade of C or higher, depending on the test, are considered for advanced standing and credit for corresponding courses.
Other Contributors to On-time Graduation – Adelman’s Toolbox

The study that most informs this research is Adelman’s The Toolbox Revisited: Paths to Degree Completion from High School through College (2006). In his study, Adelman sought to uncover the most important contributors to undergraduate degree completion for students who attended 4-year colleges at any time in their career. To that end, Adelman examined a variety of variables using linear regression and logistic regression. Using what was at that time the most recently completed national grade-cohort longitudinal study conducted by the National Center for Education Statistics—NELS:88/2000, Adelman culled relevant information from the transcripts of the students including: demographic background and high school history; timing of post-secondary entrance; type of institution; first post-secondary year curriculum and performance; factors of financing postsecondary education in the early years; postsecondary attendance patterns; and extended postsecondary curriculum and performance.

In seeking to determine how the undergraduate degree completion rate could be improved, Adelman isolated four factors that appeared to consistently contribute to undergraduate degree completion among the sample. First, Adelman found that students who earned 20 or more credits in the first calendar year of enrollment were more likely to complete their degree. Second, Adelman found that the higher the ratio of non-penalty withdrawals and no-credit repeat courses to all courses attempted by a student, the less likely the student would be complete their degree. Third, Adelman found that students who accumulated at least four credits during summer terms were more likely to complete their degree. And finally and perhaps most intuitively, Adelman found that above average (top 40%) high school academic performance in terms of grades, curriculum content, and no delay of entry after high school also positively influenced undergraduate degree completion.
To determine how the four factors/variables mentioned might influence degree completion, Adelman created a Hypothetical Cumulative Consequences table for the NELS sample which for the purposes of this study will be referred to as Adelman’s model.

Starting with a baseline of no conditions, Adelman determined that the completion rate for the sample—using an 8.5 year timeframe, was 64.6%. When ‘no delay of entry into college following high school’ was added as a condition, the hypothetical completion rate increased to 67.9%. When ‘top 40% of high school curriculum and highest high school mathematics above Algebra 2’ was added as a condition, the hypothetical completion rate increased to 84.1%. When ‘more than four credits in summer terms’ was added as another condition, the hypothetical completion rate increased to 89.1%. When ‘20 or more credits in the first calendar year of attendance’ was added, the completion rate jumped to 91.4%. And finally, when ‘less than 10% of grades were withdrawals or no-credit repeats’ was added, the hypothetical completion rate jumped to 94.6%, a full 30% higher than the baseline completion rate of 64.6%.

The condition that appears to register the greatest impact on degree completion rates in Adelman’s model is the high school curriculum condition. Adelman concluded that ‘the academic intensity of secondary school curriculum serves as the engine for subsequent academic momentum and the use of summer terms for substantive postsecondary coursework is an effective booster to that engine (Adelman, 2006).’

**Student Engagement and Persistence**

There is also a body of literature on student engagement (Hurtado & Carter, 1997; Nora, 2004; Pacarella & Terenzi, 1979) as it relates to student persistence that informs this study. Student persistence refers to a student’s willingness to continue their post-secondary studies from semester to semester until they complete their degree.
In their quantitative study of freshmen at Syracuse University, a large, independent university in central New York, Pascarella & Terenzi (1979) investigated the association between freshman year voluntary persistence/withdrawal decisions and different types of student faculty informal contact beyond the classroom. Their sample consisted of 528 students. Pascarella & Terenzi hypothesized that other things being equal, the higher the student level of social and academic integration the more likely the student is to persist at the institution and the nature and quality of these interactions is what leads to the differences in a student’s level of integration into the academic and social systems of the institution.

The results of their study demonstrated that the measure for total informal contact with faculty beyond the classroom had significant partial correlations with persistence/withdrawal decisions (Pascarella & Terenzi, 1979). Further, they noted that informal contact with faculty beyond the classroom which focused on intellectual and course-related matters generated the largest significant partial correlations (Pascarella & Terenzi, 1979). This finding led Pascarella & Terenzi to conclude that student-faculty informal interactions which extend and reinforce the formal academic experience help to foster a student’s academic and social integration and therefore a student’s persistence. If such student-faculty informal interactions support persistence, it seems logical to speculate that these interactions may also contribute to on-time completion.

While Pascarella & Terenzi (1979) focused on informal student-faculty interactions on persistence, Hurtado & Carter (1997) sought to examine the contribution that a student’s ‘sense of belonging’ makes to persistence. Their study “combined four major sources of data on students and is part of the National Survey of Hispanic Students (NSHS), a national longitudinal study of Latino college students who were among the top PSAT achievers (Hurtado & Carter,
1997).” For measurement, the researchers used Bollen & Hoyle’s first dimension of perceived cohesion: the Sense of Belonging Scale, which has been tested on various populations (Hurtado & Carter, 1997). Hurtado & Carter felt that by studying ‘a sense of belonging’ they would be able to assess which forms of social interaction (academic and social) further enhance students’ affiliation and identity with their colleges and therefore foster persistence (Hurtado & Carter, 1997). They ‘hypothesized a path model of student’s sense of belonging that reflected a causal relationship between students’ background characteristics (gender and academic self-concept) measured prior to college entry; college selectivity; ease in transition to college in the first year; and perceptions of a hostile racial climate in the second year (Hurtado & Carter, 1997). Their objective was to test the significance of college-transition experiences and diversity aspects of the environment to the students’ sense of belonging in the overall college community during their third year of academic study (Hurtado & Carter, 1997).

However, the most relevant part of their work as it relates to this study is that they also attempted to test whether: a) students with good grades experienced a greater sense of belonging and b) if participation or membership in wide range of student organizations and activities led to a greater sense of belonging (Hurtado & Carter, 1997). What Hurtado & Carter found was a strong relationship between students’ sense of belonging in college and reports of frequent discussions of course content with other students outside class. They also found that ‘students who reported tutoring other students and frequently talking with faculty outside of class in their third year of college tended to report a relatively high sense of belonging compared with those who engaged in these activities less frequently (Hurtado & Carter, 1997).’ In contrast, they found that students’ GPAs in both the second and third years of college were not significantly associated with students’ sense of belonging.
In terms of a sense of belonging and participation in student organizations, Hurtado & Carter found that only students who belonged to religious organizations and to sororities and fraternities had a significantly stronger sense of belonging than nonmembers in the second year of college, leading them to conclude that early memberships have a lasting effect on students’ sense of belonging. The researchers also found that members of religious clubs, the student government, and sports teams also tended to have a significantly higher sense of belonging than did nonmembers in the third year—a time when membership in fraternities and sororities were not significant to a sense of belonging (Hurtado & Carter, 1997).

While Pascarella & Terenzi and Hurtado & Carter focused on in-college experiences, Amaury Nora’s study examined the dimensions of precollege psychological factors, determined the extent to which those factors were reflected in students’ college choices, and established the effects those factors exert on measures of student satisfaction (Nora, 2004). Student satisfaction is equated to ‘fitting in’ and ‘fitting’ in at a particular college has been linked to student persistence (Nora, 2004).

The sample for the study consisted of 893 first-time degree seeking students from three southwestern universities (Nora, 2004). Nora found that students’ college choices and their subsequent satisfaction with their college experiences are the result of a complex interplay among personal and institutional factors which she refers to as psychosocial factors. These psychosocial factors were identified as follows: 1) personal acceptance—a student’s need to feel welcomed and cared about at a particular institution and the method by which he or she learned this personal institutional quality (usually the campus visit); 2) precollege leadership experiences—which captured the personal and academic credentials that influence students’ college decisions; 3) academic self-esteem—the importance students placed on selecting a
college where they felt academically confident and appropriately challenged; 4) extrafamilial encouragement—the support and encouragement students sensed they received from people outside their family; 5) personal and social fit—self-awareness on the part of students with respect to their abilities to project their personal and social identities onto a college campus to determine how well they would fit personally and socially at a specific institution; 6) institutional support—the support that students perceived was offered from a college that they were considering for enrollment; 7) early precollege influences 8) family encouragement—a direct measure of parental influence on college aspirations and a student’s ultimate choice of where to attend college; 9) approval by others; 10) relationship motivator—the influence exerted by friends and relatives who already had attended a specific institution; 11) future objectives—a student’s desire to attend an institution to ensure earning a good salary upon graduation and the possibility of being accepted into graduate and professional schools after earning an undergraduate degree; 12) institutional financial aid—the influence that an institution made through its efforts to assist students financially making a student’s education affordable (not a reference to actual dollars received); and 13) institutional location—a student’s desire to attend a college because of its close proximity to his or her home (Nora, 2004).

The study results revealed that previously established college choice factors such as high school grades, preparation, and institutional attributes were less influential in the making of a final matriculation decision than the psychosocial factors (Nora, 2004). However, Nora also found that the psychosocial factors also influenced subsequent commitment to an institution, satisfaction with academic experiences, satisfaction with campus environmental factors, satisfaction with unexpected college expenses, and acted as a predictor of the intent to return to college for another year, i.e. persistence (Nora, 2004).
The engagement literature as it relates to persistence can be viewed as relevant to this study since without student persistence there can be no degree completion. The student engagement factors generated from this body of literature (Hurtado & Carter, 1997; Nora, 2004; Pacarella & Terenzi, 1979) provides two categories of persistence influencers—pre-college factors and in-college factors. Of the factors identified, three pre-college persistence factors and three in-college persistence factors appear to have the most potential to relate to on-time completion. These factors are: 1) pre-college self-identified academic ability; 2) pre-college family support/encouragement; 3) pre-college extrafamilial (institutional) support/encouragement; 4) in-college informal faculty interactions; 5) in-college participation in student clubs, organizations, and/or athletic teams; and 6) in-college strong academic performance. Since it is possible that some of the factors that influence persistence may also influence timely completion, these factors are worth considering in the evaluation of the findings of this study.

Summary

The review of the literature suggests that while early college credit program participation may contribute to academic on-time completion for FTFT students, other factors such as those identified in the student engagement literature and Adelman’s Toolbox Revisited may also be relevant contributors to on-time graduation.

Ultimately, this study seeks to drive Adelman’s research forward in two important and distinct ways. First, using a quantitative approach, Adelman focused on student centered variables to determine how they helped explain undergraduate degree completion. In contrast, while Adelman’s student centered variables will be accounted for, this study will utilize a qualitative approach to gain insight from the most direct source possible—the students who
successfully completed their undergraduate degrees on-time—to determine the most relevant contributors to timely degree completion from their perspective.

The second important distinction between the Adelman study and the present study is the length of time to degree completion. In his work, Adelman used the maximum length of postsecondary time allotted to the *High School Class of 1992* for degree attainment, 8.5 years. This study will focus on a group of students who completed their undergraduate degree in 4.5 years or less—the standard measure for on-time completion.

The undergraduate transcripts of the study participants will also be examined through the lens of the four conditions Adelman used in his completion model—1) challenging high school curriculum (early college credits will be used as a proxy); 2) 20 or more credits in the first calendar year of college; 3) summer term credits earned; and 4) less than 10% withdrawals or no-credit repeats.

In seeking to determine the most relevant contributors to on-time graduation, this study has the potential to create change in public policy by broadening the focus for on-time graduation from the earning of early college credits to include other areas. Further, by identifying contributors to on-time completion not previously considered, the findings of this study could help Virginia’s public universities develop programs to help FTFT students complete their undergraduate degrees on-time.
CHAPTER THREE - METHODOLOGY

The small percentage of FTFT college students completing their undergraduate degree within four years is an ongoing challenge in Virginia. Extending the time it takes to complete their degree results in increased costs for both the student and the state. This study seeks to determine the factors that contribute to on-time undergraduate degree completion from the perspective of a group of students who successfully completed their degree in 4.5 years or less.

While participation in early college credit programs have been posited as an effective tool for helping students to complete their undergraduate degree on-time by enabling them to earn college credits while in high school, recent research suggests that there may be other relevant contributors that should be supported by high schools, higher education institutions, and the state.

Research Design and Methodological Rationale

A qualitative methodology was chosen for this study as this method provides for variety and richness of responses from the study participants through in-depth interviews. A case study design was chosen so that the responses can be evaluated within a known singular context which should lead to a greater understanding of the findings. The case consists of a group of college graduates from Virginia Commonwealth University in Richmond, Virginia. What distinguishes this group of former students is that they all successfully completed their undergraduate degree within 4.5 years or less—the time period considered to be on-time completion for a bachelor’s degree.
One of the purposes of this study was to try to illuminate the decisions the students made or experiences the students encountered that resulted in the timely completion of their undergraduate degree. While this study could have been conducted at any of the public universities in Virginia, the primary reason for selecting Virginia Commonwealth University was that the 4-year graduation rate at Virginia Commonwealth University is representative of the on-time graduation challenge this study seeks to investigate. For example, only 26% of the cohort of students that entered VCU in 2005 (most recent year for which data is available) as FTFT freshmen completed their undergraduate degree within 4 years. Further, the institution provided ease of access for recruitment and interviewing as the researcher is currently enrolled at VCU as doctoral student.

While this study sought to determine common factors that enable students to complete their undergraduate studies in on-time, it was expected that each participant’s journey would be unique. However, within the journey of each participant this study sought to uncover common experiences which provided insight into why these participants were able to complete their degrees on-time while other members of their freshman cohort did not.

Since the principal aim of this research was to develop a theory about on-time undergraduate degree completion, a grounded theory approach—which is well suited for theory development, was utilized for this study. Grounded theory is a qualitative methodology developed by Barney Glaser and Anselm Strauss in 1967 for the purpose of building theory from narrative data (Corbin & Strauss, 2008). Anselm Strauss, working in conjunction with Juliet Corbin and building on his earlier work with Glaser, went on to develop procedures and strategies for conducting grounded theory research which emphasize conditions, context, interaction strategies, and consequences for analyzing collected data (Tan, 2010). The grounded
theory methodology as outlined in the Basics of Qualitative Research by Corbin & Strauss (2008) served as the guide for this study.

It is thought that grounded theory is most applicable where the researcher seeks to do accomplish one of the following: a) create a theory about issues of importance in people’s lives and specifically focuses on human interaction or aims to explore new territory; b) complete a study of new socio-technical phenomena; or c) study an area of interest that is a new developing one and does not have a long, firm, and empirically based literature yet (Tan, 2010).

Tan (2010) outlines the six basic premises to grounded theory:

1) the world is in a constant state of flux and the individuals are not equally placed;
2) qualitative data analysis is basically pragmatic;
3) the aim of qualitative analysis is to generate new concepts and theories;
4) theories should be “grounded” in empirical reality;
5) the researcher is open minded; and
6) participants cannot be predicted entirely at the beginning of the research which affects research design.

Grounded theory aims to generate core concepts and to develop a theoretical framework that specifies the interrelationships between those concepts (Tan, 2010). The theory is built on five canons of the qualitative tradition: theoretical sampling; coding; the constant comparative method; categorizing and category saturation; and theoretical sensitivity (Tan, 2010). What is unique and appealing about a grounded theory approach is that the theory emerges from the empirical data rather than from inferences or existing theories (Tan, 2010). This methodology of analyzing qualitative data requires that the researcher be simultaneously engaged in induction, deduction, and verification (Tan, 2010). It is this constant comparison that enables on-going theory generation during the collection and analysis of the data (Tan, 2010).
Corbin and Strauss outline three processes to be used during data analysis to enable the grounded theory to emerge from the participants own voice: open coding; axial coding; and integration (Corbin & Strauss, 2008). During the open coding phase, the data is placed into broad categories which represent blocks of information derived from the raw data (Warburton, 2009; Corbin & Strauss, 2008). Axial coding is the act of relating the identified categories to each other by finding the connections in the data such as cause and effect relationships (Corbin & Strauss, 2008). And finally integration is the process during which a narrative is constructed which integrates the categories in the axial coding model thereby providing the springboard for the emergence of the theory (Warburton, 2009). Following the processes and procedures as outlined by Corbin & Strauss (2008) provided the means for a systematic examination and analysis of the data collected for the purposes of theory development.

Study Context and Setting

The study was conducted at VCU. When the university was established in 1968, brought together two separate institutions—the Medical College of Virginia and Richmond Professional Institute, under one umbrella. VCU is considered to be the most comprehensive urban university in the state with two large campuses in the heart of downtown Richmond – Monroe Park (88.2 acres) and MCV (52.4 acres).

VCU is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. The university offers 60 undergraduate programs and 110 graduate programs. Student enrollment is currently over 32,000. The university is considered to be moderately selective in its undergraduate admissions and draws most of its students from the 132 school divisions in Virginia. The median admission profile of FTFT students for the 2012
academic year was a Math SAT score of 540, a Reading SAT score of 540, a total SAT score of 1600, and a high school GPA of 3.45.

As a large public institution with a moderately selective admissions policy the student body consists of students with varying levels of ability and academic preparation prior to their college matriculation. It was hoped that the diversity of academic ability among the student body would translate into diversity of ability among study participants and it did.

**Method of Data Collection**

The sample consisted of 30 recent VCU graduates who entered the university as FTFT freshmen within six months of their high school graduation. Two methods of data collection were utilized, in-person semi-structured interviews with and the official academic transcripts of each study participant. The interviews were recorded and transcribed by the researcher to ensure accuracy. The sealed academic transcripts were obtained from VCU’s Office of the Registrar.

In order to capture graduates who would have been enrolled in high school during the expansion of early college credit programs that took place between the late 1990s and the early 2000s, the sample was restricted to graduates who completed their degree at VCU no earlier than 2004 and no later than 2011. The cut-off date for graduation of 2011 was imposed by the VCU Institutional Review Board which requires that all records precede the IRB application which was submitted in 2012. All 30 participants had to have completed their degrees in 4.5 years or less and were full-time students during the course of their degree completion. The graduation date requirement meant that the earliest enrollment date for any participant was spring or fall of 2000. While no other selection criteria was required for a participant to be included in the sample, candidates had to be within two hours driving distance of Richmond, Virginia to enable the researcher to conduct in-person interviews.
The participants for the study were recruited via email through the VCU Graduate Student Association and the VCU Alumni Association. The recruitment emails are provided in Appendix B. Twenty-six of the study participants were recruited through the Alumni Association and four through the Graduate Student Association. Participants who responded to the recruitment emails received a study information sheet (Appendix A). After a number of ineligible participants responded to the recruitment emails, subsequent recruits received a series of eligibility questions via email to ensure that they qualified for the study. Participants were asked to answer the following:

1) Date you graduated high school.
2) Name and location of 4-year college attended for undergraduate studies.
3) Date you entered college for your undergraduate degree.
4) Date you graduated from college with your undergraduate degree.

Once an eligible candidate agreed to participate in the study, an interview time and location was arranged and a study consent form (Appendix D) was emailed to them for their review. Once the interview was completed all participants received a $10 gift card from a local eatery as a thank you gift for their participation in the study.

**Instrumentation**

The data was collected through individual semi-structured in-depth interviews of approximately 45 to 60 minutes in length. A copy of the interview protocol is included in this report as Appendix C. Findings from the literature review were incorporated into the development of the protocol. Prior to the completing the interviews, the participants were asked a series of demographic and background questions to ensure their eligibility for the study.

The student engagement literature identified a number of psychosocial factors that lead to persistence: pre-college self-identified academic ability; pre-college/in-college family support/encouragement; pre-college/in-college institutional support/ encouragement; and in-
college participation in student clubs, organizations, and athletic teams. The delineation of two distinct time-periods of experience—pre-college and in-college, provided the foundational building block for the protocol. Further, specific questions were incorporated that addressed each of the psychosocial factors identified in the literature.

Questions on early college credit participation were also included to determine the number of early college credits participants earned prior to their freshman year and the role it played in on-time completion. Participants were asked to identify the specific programs in which they participated such as AP, IB, and/or dual enrollment. This inclusion incorporated Adelman’s (2006) reference to the positive effect of an intense high school curriculum for which early college credit program participation is an appropriate proxy.

Further, since Adelman (2006) found non-penalty withdrawals, no credit-repeat courses, and summer term credits to be contributors to degree completion, questions on course withdrawals and repeats as well as summer session participation were included in the questionnaire.

Participants were also asked to authorize the release of a copy of their official undergraduate degree academic transcript to be sent to the researcher for inclusion in the study. The sealed official transcripts were mailed directly from VCU Registrar’s office to the researcher at a cost of $5 per transcript.

The academic transcripts were a robust source of crucial information on early college credits granted, course load during each semester, GPA for each semester, study abroad credits, course failures, course withdrawals, and course repeats. The academic transcripts also provided verification for dates of matriculation and graduation.
Data Analysis

The data analysis for this study started with the analysis of the academic transcripts of the study participants. These student records provided information on early college credits earned; course load for each semester of study; college entry and exit; major; GPA; summer session participation; study abroad participation; course failures; course withdrawals; course repeats; and total credits earned. An excel spreadsheet was used to analyze the academic data.

NVivo qualitative data analysis software was selected to assist with the management and analysis of the large amount of narrative data generated by 30 interviews. The software, developed by QSR International, is easy to use as it utilizes a Windows type interface. While the software is geared towards much larger projects with multiple researchers, it was still extremely helpful for coding the data. All 30 interviews were transcribed by the researcher and loaded into the software program for analysis.

The two phases of coding recommended by Corbin and Strauss (2008) provided the template for the analysis of the data. The first phase—open coding, requires that the data be scrutinized in order to understand the essence of what is being expressed in the raw data (Corbin & Strauss). The open coding phase is where broad categories of high-level concepts, low level concepts, and emergent themes are identified (Corbin & Strauss).

In NVivo, the broad categories (open coding) are referred to as Nodes. The following broad categories represent were the first nodes created in the first phase: a) course of Study; b) early college credit; c) personal influences; d) extracurricular activities; e) institutional influences; f) personal strategies; and g) top contributor.

While working in Nvivo, you are able to create nesting nodes (also referred to as child nodes) within the primary nodes. As subsequent transcripts were reviewed and themes emerged, the following child nodes emerged from the data: a) study abroad under course of study; b) work,
athletic teams, student organizations & student government; and family obligations under extracurricular activities; c) college and high school under institutional influences; and d) high school, college, and personal vision under personal influences.

Further review of the transcripts resulted in a second level of nested nodes within the child nodes emerging from the data: 1) under institutional influences/college—academic advising; money; professors & administrators; and registration; 2) under personal influences/high school—friends; and parents & family members; 3) under personal influences/college—friends; parents & family members; and personal challenges; and 4) under personal influences/personal vision—before college; and once in college. A table of the open coding in NVivo is provided in Appendix E.

The second phase of analysis—axial coding, calls for the relating of the concepts identified in the first phase to each other (Corbin & Strauss, 2008). Axial coding is where the crosscutting or relating of concepts to each other takes place (Corbin & Strauss). The distinct concepts within the data and their relationship to each other became self-evident upon completion of the open coding. First, it was clear that there were indeed two distinct time periods of experiences from which on-time completion contributors could be distilled—before college and once in college. Further, within the categories of before college and once in college were two distinct types of influences—personal influences and institutional influences. It is within these two spheres of influences that distinctions begin to emerge.

Before college, three areas of personal influences emerged: 1) personal vision of self; 2) family encouragement; 3) peer influence. Once in college, personal vision and peer influence still appear as personal influencers however, family encouragement becomes family support, and personal strategies emerges as a personal influencer.
Before college, two distinct areas of institutional influences emerged: 1) academic self-esteem generated from the rigor of the high school curriculum; and 2) institutional encouragement in the form of guidance counselors and teachers as a proxy for family encouragement. Once in college, the institutional influences that emerged were: 1) scholarships/financial aid to pay for college; 2) guideposts for completion such as bulletins and worksheets; 3) ease of course access such as registration and summer sessions; 4) academic advising and relationships with professors and/or administrators as a proxy for family encouragement; and 5) academic advising and relationships with professors and/or administrators, supplemental instruction, and other academic support mechanisms as a proxy for academic self-esteem. Please see Appendix E for the list of the nodes used in open coding.

The final process of analysis is integration—the construction of a narrative which integrates the categories from the axial coding phase. It is from this constructed narrative that the grounded theory emerges (Corbin & Strauss, 2008). The narrative that was constructed based on the analysis completed during axial coding is as follows: There were two sets of influences that impacted a participant’s on-time degree completion, personal and institutional. These influences are separate and distinct pre-college and during college. In some cases, institutional influencers acted as a proxy for personal influences to guide the participant to on-time completion. However, a constant thread before college and during college was the participant’s personal vision that he or she could and would complete their degree on-time.
CHAPTER FOUR - FINDINGS

Characteristics of the Sample

The sample consisted of 30 participants. Pseudonyms were assigned to all participants in the study.

Of the 30 participants, 4 were male, 26 were female. All participants completed their undergraduate degrees at Virginia Commonwealth University. To be included in the study, participants had to meet the following criteria: 1) entered college as a first-time, full-time (FTFT) student within 6 months of their high school graduation; 2) completed their undergraduate degree in 4.5 years (4.5 years or less; 3) graduated between 2004 and 2011. The starting graduation timeframe of 2004 was selected to ensure that all graduates fell within the time period of expansion of the Advanced Placement and other early college credit programs which took place starting in the late 1990s and the early 2000s.

The year of graduation was fairly diverse among the participants. Four participants graduated in 2004; 2 graduated in 2005; 2 graduated in 2006; 4 graduated in 2007; 3 graduated in 2008; 4 graduated in 2009; 5 graduated in 2010; and 6 graduated in 2011.

The participants represented 16 different counties or independent cities in Virginia based on where they completed their high school diploma. The counties represented in the sample are Albemarle, Botetourt, Chesterfield, Fairfax, Henrico, Loudon, Orange, Powhatan, Prince William, and York. The independent cities/towns represented in the sample include Alexandria, Ashland, Fredericksburg, Newport News, Suffolk, and Virginia Beach.

There is a good representation of first generation college attendees among the sample. Eight of the 30 participants (26%) were the first in their families to attend college: Heather
Anderson; Helana Braithwaite; Sharon Campbell; Fred Hermitage; Shauna James; Kara Jonas; Paris Robinson; and Petra Simmons. In addition, while they weren’t the first in their families to attend college, Ursula Gary, Lisa Normandy, Rose Lee, and Mark Winston were the first in their families to complete a 4-year degree.

Most of the participants (76%) entered college with some form of advanced college credit. Only 7 of the 30 participants entered college with absolutely no early college credits. Almost all of the early college credits were earned through Advanced Placement, Dual Enrollment, and International Baccalaureate. One participant received credit for a college course taken during the summer prior to the start of their freshman fall semester. No other early college credit programs were represented in the sample.

The 23 participants who started their first semester with early college credit can be divided into three groups for the purposes of this study—Group 1 earned 1-6 early college credits (or up to the equivalent of 2 college courses) prior to the start of their first semester, Group 2 earned 7-15 credits (or up to the equivalent of 5 college courses), and Group 3 earned 16 or more credits (or the equivalent of more than 5 college courses. Seven of the participants fell into Group 3. Michelle Miles had the highest number of early college credits, 34 in total. She earned 21 credits from Advanced Placement courses and 13 credits from Dual Enrollment. Most of the participants, 13 in total, fell into Group 2. Only 3 participants fell into Group 1.

While 8 of the participants earned their early college credits through Advanced Placement courses only, 6 of them earned their early college credits through Dual Enrollment courses only and 2 of them through International Baccalaureate courses only. Six of the participants earned both Advanced Placement and Dual Enrollment credits while only 1 participant earned both Advanced Placement and International Baccalaureate credits. None of the
participants combined International Baccalaureate credits with Dual Enrollment credits. Please see Appendix F for a complete listing of early college credits earned for each participant.

There was a diversity of majors among the participants: 2 in Accounting; 1 in Biology; 1 in Biomedical Engineering; 3 in Business Management; 1 in Criminal Justice; 1 in English; 1 in Fashion; 2 in Forensic Science; 1 in Global Studies; 1 in History; 1 in Homeland Security; 2 in International Studies; 1 in Education; 1 in Mass Communication; 1 in Mechanical Engineering; 1 in Music Education; 2 in Nursing; 4 in Political Science; 1 in Psychology; 1 in Religious Studies; and 1 in Social Work.

Participant course load in the first year of studies—including the summer term, ranged from 25 to 38 credits. The average course load was 31 credits—the equivalent of 5, 3 credit courses per semester. The grade point average (GPA) for the participants ranged from 2.0 to 4.0 in the first year with a median GPA of 3.0. Participant course load in the second year of studies ranged from 21.5 to 53 credits however, the average course load for the second year of studies was also 31 credits. The GPA range for the second year of study started slightly higher at 2.38 to 4.0. The median GPA for the second year was 3.5. Only seven participants had GPA’s that were 3.0 or lower while in the first year 10 participants had GPA’s that were 3.0 or lower. Participant course load in the third year ranged from 20 to 45 credits with an average course load of 32 credits. The GPA range for the third year was 2.0 to 4.0 with a median GPA of 3.3 however, nine participants had GPA’s that were 3.0 or lower. In the fourth and final year, participant course load ranged from 15 to 58 credits with an average course load of 30 credits. The GPA range for the fourth year was 1.92 to 4.0 with a median GPA of 3.67. Six participants had GPA’s of 3.0 or lower at the end of their final year of study. The majority (70%) of participants took courses during the summer session and/or winter intersession however, only 6 participants participated in
a study abroad program. Please see Appendix G for a complete listing of participant course load and GPA.

Only 4 of the participants in the study received a failing grade in a least one course during the course of their degree completion. However, the majority of participants (73%) withdrew from at least one course during the course of their degree completion.

Almost half of the participants in the study received financial support in the form of some type of scholarship during the course of their degree completion—some as little as a one-time $500 gift. Other scholarships were as large as paid tuition for the entire four years of their degree completion. In most instances, the multi-year scholarships provided to the participants were only available for a four year period and required continuous enrollment.

Of the 30 participants, only 4 did not work while classes were in session for the entire four years it took to complete their degree. Of the 26 participants that did work while attending classes, 11 did not work during their freshman year and 5 of those did not work during their sophomore year. All other participants worked while classes were in session for the duration of their degree completion. The average hours per week that participants worked increased in each successive year of college. The average hours worked in their freshman year was 18 hours and increased to 21 in their sophomore year, 24 in their junior year, and 25 in their senior year. The number of participants working the equivalent of full-time employment also increased as participants entered the senior years of their degree. In their freshman year only 2 participants worked 30 or more hours during the semester. By junior year, 8 participants were working more than 30 hours per week while maintaining full-time enrollment.
Almost all of the participants (86%) engaged in some form of student life including social clubs, intramural sports, Greek life, or volunteering at some point during their college career. The level of participation varied from occasionally to frequently.

**Contributors to On-time Completion**

The protocol was designed to elicit responses from participants that created a natural divide between their thoughts on college completion during high school and their thoughts on college completion during college. The purpose of the protocol design was to help isolate changing views in the participants that came about as a result of their experiences while in college. What emerged within these two broad areas of high school and college were two categories of influences—personal influences which included family and friends and institutional influences which included institutional personnel as well as institutional systems such as registration. What quickly became self-evident among almost all the participants is that they entered college with the expectation that they would complete their college degree in four years.

Pseudonyms have been used for all participants in the study.

**Contributors to On-time Completion in High School**

**Personal Influences – Personal Vision**

When asked about their thoughts on college completion while in high school almost all of the participants indicated that they just assumed that completing in 4 years was the standard for everyone. Jackie Hall indicated that when she was in high school she didn’t even think there was another option other than completing her degree in four years. Heather Anderson, Ursula Gary, and Petra Simmons agreed.
(HA): It never occurred to me that it would take more than four years. The way everything was set up in my mind, college is four years and that is how it is.

(UG): It never really occurred to me that I wouldn’t finish college on time. It didn’t occur to me that it would take me more than four years.

(PS): It was just what I was going to do. There was no real thought about it, it was just what you were supposed to do, so I did.

Personal Influences — Family and Friends

What clearly emerged among participants was that while they were in high school, there was very little talk of college completion among their personal influences. The focus was on getting into college as summarized by Everly Delapena:

(ED): With my family it was more about getting into college and especially with my mother. What do you want to major in? What do you want to do? (Completion) wasn’t necessarily something that I was thinking about so much.

However, five of the participants did indicate that their parents specifically referenced completing on-time: Josie Azouri, Andrea Locklear, Lisa Normandy, Barbara Sanchez, and Mark Winston.

(JA): Well, probably one of the reasons why I did graduate early is I had really wanted to study abroad and so in order to influence my parents I said, if you let me study abroad, I will finish early, earlier than the four years. Within our family our expectations are four years so I did everything, you know I was on track to graduate in three and a half years so they allowed me to.

(AL): Mostly it was about applying and where do you want to go to school and stuff but my parents were definitely a fan of me getting it finished all in four years, not doing five because Thomas (her brother) did unless I found a program that was a five-year thing.

(LN): It was not an option to not complete school on time. It was, I actually signed a legally binding contract on the way to school, that had everything laid out, you will graduate on time or you are responsible for all of the bills and loans that I have accumulated. You will not fail any courses or you will be responsible for the bills and loans that I have accumulated. You will not, it was just a list of rules and I had to initial each one.
(BS): It was always, “What are you going to do after four years”, always the kind of underlying, “you’re not going to be on a six-year plan or whatever.”

(MW): I am very fortunate. My parents set aside money for me to go to college. And initially they had saved enough that I would be able to go for four years and they had told me that this is what we have and they had enough money to send me for the four years. (They said) if you don’t complete it in four years, everything after that is on you. So I kind of had the motivation to do four years and I didn’t expect to take longer than four years. I didn’t see myself dropping out of a lot of classes or taking the minimum.

For some participants, the failure of family members to complete on-time acted as an incentive for them to set their intention to complete on-time while they were still in high school. For Chelsea Zehrig, it was the actions of her sisters that motivated her. Faith Eulette and Opal Huntington had similar experiences.

(CZ): I just wanted to finish in four years because both of my sisters had gone to college and they had spent 6 or 7 years in college. And financially, it was really hard on my parents so I was like okay, I need to finish early or not early but on-time so that was just kind of like my motivation to not be like my sisters.

(FE): My oldest sister had gone but she failed out. My oldest brother had not attempted at that point but now has completed that and his Masters. My second oldest sister, she was in when I entered, she’s five years older than me but she took five, maybe five and a half years to complete. And my middle brother was going into the navy and not on the college route. But, when I was in the fifth grade I was always talking about going to William and Mary to become a physical therapist. It was always in my future.

(OH): I have to admit I watched my sister graduate in five years and it was hard to watch her, watch her friends finish sooner than she did and that was really hard for her. But as far as for me, my course was set out for me.

Institutional Influences—Guidance Counselors and Teachers

The same focus on getting into college rather than on-time completion can be said of the participants’ institutional influences while in high school. These institutional influences
consisted primarily of guidance counselors and teachers. Jackie Hall, Michelle Miles, Lisa Normandy, and Mark Winston all recollected memorable institutional influences in high school.

(JH): *We had a regular program for parents at our school that was about how to finance, it was a lot about money. I grew up in Daleville, on the outskirt of Botetourt county and that’s a rural farming community. It’s near Roanoke, southwest Virginia. So a lot of it was about finance. It was about how to pay for your children’s college. How to support them in that and that money shouldn’t be what stops you from sending your kid to school. So that was a regular parental program. I am the oldest in my family so I was the first kid to go to college.*

(MM): *There was one guidance counselor who made sure that everything was going where it was going. He knew about the college process but he wasn’t just going out and telling people about it. I sought him (out) and said hey, this is what I want to do. And he was very helpful and got me where I was going.*

(LN): *Our school (was) very college bound. I believe it was in their mission statement to prepare students for the next level. So it was very, “where are you going next” oriented. For our junior and senior year we took personality tests, which told us what fields would suit our personalities the best. All of teachers were always asking us, where do you want to go. Our English assignment for 12th grade was to write college essays to all of the schools that we even remotely thought about going to. So we all had to have a list of six schools. We all had to look up that list of schools and write an essay to their prompt. And if you decided to use it for your college portfolio or application then great. And if you did not, it was still a grade in order to graduate.*

(MW): *I regularly went to the gifted resource teacher that was there in high school. It wasn’t so much a class but you could go have lunch there, meet other gifted students and things like that. And she would always ask, what are you guys doing to prepare for college and things like that and kind of directed the question, not so much are you going to college but what are you doing to prepare for college with the innuendo that you are going, it’s not a question of if you are going. But like I said, that wasn’t really a problem since most of the friends I had met there already planned on going to college anyway. She probably gave a little bit of insight into college and she scheduled a couple of tours as a group to go outside of VCU’s scheduled tours so that we could meet with students who had graduated from my high school and that had already been on campus. And they would say VCU will tell you this but this is how it is which wasn’t very different, more of an insight into student life but there wasn’t a whole lot of emphasis on college completion at least not that I remember.*

**Contributors to On-time Completion in College**

The second section of the protocol required the participants to reflect on the influences once they were in college. Like in high school, the influences fall into two categories, personal and institutional. While the personal influences of family and friends are still present in college,
other personal influences that emerged that relate to the participants directly—personal challenges, family obligations, and personal strategies.

Personal Influences—Family and Friends

The most frequently mentioned family influence during college was financial support.

(FE): *My parents were great in that they were able to foot the bill. And so I did feel obligated to do my best because of that. I always felt that they were giving me such an opportunity and I needed to do my best. I believe I pretty much did that. And I actually got married in the fall of my senior year, and I put the idea out there that it would be a wonderful, wonderful, wedding present to cover my last semester, and they did do that because. At that point, if I was looking for financial aid, they would have looked at my past financial situation, a somewhat privileged white girl and they would have laughed at me.*

(JH): *A big part of the conversation was money, how to finance it. So I think that was also part of the four year conversation. You have four years to get this done and that’s it. I have two siblings and we understood that our parents were going to pay for four years of college and anything beyond that was on us. So, I think that was also part of the incentive to get it done in four years. It is not that they would have thrown us out on the street but four years, the end. So I got it done in four years.*

(LN): *I know the stress of not worrying about money impacted my college completion because my Mom took care of the paperwork for student loans. All I know is I had to go and sign, and make sure everything was okay but that was a day before classes started where I had to sit down and go over everything and make sure all the money went through and everything was paid for, books were paid for. I would have a certain amount of dollars for books so my Mom was just like $300 left for books, you’re going to have to come up with the rest but I was working so I kinda had that on the side. But my Mom was okay, she would send me a credit card, all I could do was buy books and then I would have to send it back to her. So it was very good. I didn’t have to worry about the financial portion of things. There were some financial stressors. But nothing like the stress of having to pay tuition or making sure that other things were paid for. I just had to make sure my necessities were taken care of and that would be everything but the books.*

Beyond issues of money, once in college, the sphere of influence on completion appears to shift from family members to friends for better or worse. The influence from friends seemed to be evenly distributed between positive and negative reinforcement. Of the participants who described being influenced by their peers, about half indicated that their friends helped keep them on track.
(FH): I joined a lot of organizations on campus. It surrounded me with people who were doing something in school and who were focused on graduating. It keeps you from hanging out in the commons and not doing anything. You stay around focused people, people who were graduating and trying to do something with their life. The people that I knew in the organizations graduated (more frequently) when compared to the other people that I knew (that weren’t in organizations).

(SR): Having peers that are in the same class helps you get through the classes and do well. And I guess when it came closer to graduation friends were more like a support group. I guess it did help that all of us were on the same page going towards the same goal and finishing on-time.

(AT): I absolutely wanted to leave school with the best GPA, just with an awesome record and be able to say, Hey! My goal was to graduate summa cum laude and I ended up just missing it by like 10ths. So it was devastating. I wanted that written on my diploma. And I ended up finding other people who were like me in school and just gravitating to them. And they were the other Summas. So we studied together, we just worked together, and it was great because I felt as though I wanted to be a part of that group but on my own merit so I think that was what drove me to do it.

(BS): Within my group most (of my friends) would talk about getting into your upper class junior and senior year and talk about completion and what are they going do next. So I think that is where it escalated. But I think throughout the whole, from freshman year to senior year, a lot of people talked about where they were going to after four years. So kind of like assuming, ‘I’ll be done’ was the norm.

(CZ): My senior year I was like, I am done with school, I can’t take this anymore after like my first semester of my senior year and they (her friends) were like “no, you’re finishing, you gotta keep going. Keep doing it.” And I did so that was kinda good, whenever there was a low point they were just like “no, you can do it, keep going.”

For several of the other participants, the actions or situations of their peers served as an example of what they did not want for themselves. Completing on time was about getting it done regardless of what their peers were doing

(SJ): I think it was just that I wanted to do it in a timely fashion just because I wanted to look good. And my parents were you need to finish. And I saw those people who were here for six-years, seven years, and I was like I don’t want to be that person. I want to graduate on time.

(JA): For me, it was just get it done. I do have a lot of friends that lingered on and it’s because they didn’t know exactly what they want to do. But I figured that I would just get this over with, get it done. It’s just a stage in my life and move on to the next thing.
(VK): It was a very conscious choice for me to stay (on the on-time completion track) and it was frustrating for me to see that maybe my friends weren’t applying themselves as much as they could and then at the same time trying to be supportive of them and helping them graduate as soon as possible, even if it were a little bit late.

(RL): I knew what I wanted, and if they were goofing off, that’s fine. My first year of school, I lived at home, I went to school, I did my homework, that was it. I mean, that was all I did. I wanted to do well.

(LN): My boyfriend at the time was not as academically focused as I was. I was very academically focused. I took the time to study. I went to the supplemental instruction sessions that were offered at VCU. I took advantage of everything that was available. In my mind it just made sense because it just made school easier.

**Personal Influences—Personal Challenges**

An interesting finding was the fact that several of the participants had to overcome great personal challenges in order to complete on-time. For example, Rose Lee, a single student, became pregnant prior to the start of her senior year and had her baby at the beginning of her final semester. She also worked 30-40 hours per week at the to support herself during that time.

(RL): *In January, I had my baby. I was working that weekend and I had him right after my shift. I had him that Sunday, I was discharged that Tuesday, and I was in class Thursday. I couldn’t even sit down. And it’s senior year so class is four or five hours long. My professor offered to give me an excused absence but I thought this is the first week of school; they are going through the syllabus and what needs to be done. They (the professors) would have still held me accountable for the material so I might as well just sit in class. That was a little rough. My friend asked, “Aren’t you going to take the semester off?” I thought, I have a baby, I am already putting in 50-60 hours of work a week. I am making $12 an hour. You know, a baby is just going to cost more so I am not taking a break. Also, I didn’t know how it would affect my financial aid. I knew I didn’t have the money to finish school if I didn’t have financial aid. I decided I am not staying here another semester, I am finishing. My mother was so upset with me that I did not have anybody to watch him the last couple months of school so I had to take him to class with me. The teacher was not too happy with me. But my friend would help. She would walk him in the hallway and we would switch out. I would just be so tired. So that was really, really awkward, having to take him to school.*

Michelle Miles, a student in the guaranteed admission program for medicine, experienced a serious medical challenge that required her to withdraw for a semester.
(MM): I withdrew from an entire semester. It was for medical reasons. I was doing quite poorly. If I wasn’t an honors college student, it wouldn’t have happened. I think part of me graduating on-time even though I had to take a semester off, was because of the advising. They were the one who were able to get me through this enormous amount of paperwork, contacting every professor that I had the previous semester, getting them to okay this. What do they need to know, a letter from your doctor? It was crazy, almost as bad as applying for college to apply to get a semester off. And getting all that in, and I think a large part of me graduating on time, was the advising system that’s in the honor’s college. I had to take 9 credits in the summer and a 3 credit intersession class. So I pretty much made up my semester.

Irene Greeves also became ill and had to withdraw from most of her classes.

(IG): My family background, it was a single parent household, so I knew coming into college, financially speaking, it was going to be difficult in that a lot of the burden was going to be on me. I did end up having scholarship and I did end up having help from the veteran’s administration because of my father but there is more to being in school than just paying for school. So I was working almost full-time and I strung myself too thin. And I ended up getting really, really sick. I was trying to function and I wasn’t putting myself into anything well enough and finally it just caved, everything caved. That’s how it ended up being that I withdrew from a class and I ended up failing a class. I ended talked to one of my professors and she gave me an incomplete and I was able to focus on the two classes that I did have and get through those which is what I needed at the time. I just pushed through and made it through and rested up that summer. I actually ended up getting my gall bladder taken out which was the base of the issue and then pushed on.

Personal Influences—Family Obligations

Another unexpected finding was that several of the participants had to manage family obligations despite being enrolled as full-time students.

(SC): My younger sister came into college as I was a senior and she ended up moving in with me, that was a chaotic living situation. And in a way, I had to teach her everything about coming into college since no one else had. And so everyone basically looked to me to literally get her through and make sure was registering for classes on time and make sure she was doing her homework. So, I became house mom and not so much sister. I basically would have to drag her to the Registrar’s office to get a paper signed or something and she just, she relied on me a lot for not only school things but to make sure the apartment was in order and that the bills were paid on time and if something went wrong with the cable, I had to call.

(VK): I am the oldest of five children so I was still responsible for helping raise my two siblings who were at the time a lot younger than I was. My brother passed away the summer before my senior year and at that point I was very fortunate to, in that respect, to live so close to home, to
be able to go back and help my parents out during that obviously very difficult time for them. So I still was very much a part of my siblings’ lives, running them on errands, taking them to soccer practice while I was in college.

(SR): I lived at home all through undergrad so just chores and I did have a younger brother so once in a while my parents would ask me to help out with him. It wasn’t so much that it was overwhelming. My parents understood that I had school to worry about too.

(BW): My family lives in Chesterfield so if something big happened to come down the line, it was a reasonably regular thing for me to be called back home.

Personal Influences—Personal Strategies

Despite various influences or challenges, all the participants employed some sort of personal strategy to ensure that they were on track to graduate on-time. The most frequently cited strategy utilized by the participants involved identifying their program requirements for graduation at the beginning of their freshman year and mapping out what they needed to take each semester in order to graduate on-time.

(JH): I had the bulletin that I was issued when I came in and then I had my graduation worksheet, and I assume other programs have those. It had all of the courses that I would need to graduate on it—you’ll need these maths, these sciences, these chemistries, these biologies, and then your electives. So you have this list that you can choose from. Then you write down how many credits (you earned) and what your grade (you received in the course). And I just kept that all the way through—the same one from when I came in 2005 to when I left in 2009. I was able to keep up with that. Some people don’t but I did.

(JA): What I would do is every year I would print out the documents for the requirements for my degree and my specialty and I made sure I checked off the ones that I had completed. I would go through and look at all the courses that I still needed to take and read the course description and decide which ones I was going to take that semester. So I made my decisions that way and I made sure I had a full course load. I had five courses each semester. So, I definitely made sure about that. Basically I had my paper—I still have them stored away—where I checked off what I was doing each semester. I kept track of the dates I could register so I could get online and make sure I got the courses.

(GC): I would just either go onto the website or either the handbook that would say the degree requirements for my degree and then I think were like papers that you would write down what courses you had taken and I would just keep track of that I would write them down and then I
could see what I hadn’t taken and then I would map it out—okay, I need to take these classes, this semester and these classes that semester.

(ED): It was a combination of having had those conversations with advisors and having personally educated myself of the number of credits that were required and literally sitting down with a piece of paper and mapping it out by myself. And whenever I talked to an advisor I was always prepared.

(KJ): They give you at the beginning, pretty much a rubric that you have to follow and as long as you meet that criteria, you can get everything accomplished. So I took that rubric and that was my rubric for my four years and I planned out four year’s worth. When I decided to do a year abroad, I went back to that rubric and said okay, what can I do to make this happen rather than going to an advisor and saying what can I do to make this happen, please help me. So what I would do is every semester when I am getting ready to register for the following semester, I would pull out that rubric and I would look and see all the courses I have already completed, the courses I need to complete and the courses that I have that wiggle room, and the courses that I could apply to those specific categories. And I just followed that rubric and was able to ensure that I completed what I needed to complete within the four years.

Many of the participants also engaged in other personal strategies to meet their individual needs.

For Josie Azouri, it was about using night classes to balance school and work.

(JA): I did take night courses. With the exception of my first semester, I did take about two night courses a semester. And I also blocked it out so that I had certain days fully off from school so that I could work those days.

Helana Braithwaite’s personal strategy was to use summer courses to lighten her load during the school year.

(HB): I took summer classes each summer in between, including the study abroad. I always took summer classes because I also, if I didn’t have to, I didn’t like to take more than twelve credits a semester. A lot of times I would take fifteen but if I could I would have rather have taken twelve because I also worked. I usually had a couple of part-time jobs. I also liked to take those summer classes because they were condensed. You’re in four or five times a week for hours and hours. You sort of got through the class a lot quicker to cross that off the list.

For Mark Winston, it was managing his more difficult courses by reducing his course load in semesters when he had course that were challenging and increasing his course load in other semesters to stay on track.

(MW): I kind of broke it down and said the average for each semester that I have to take is 15 (credits) and if I take 15 credit hours then I will complete it in four years. But as a freshman, I
took 18 credit hours a couple of semesters, and then there were semesters when I thought I would be having harder classes and I dropped it back to 12. So it kind of varied but I stayed on average and that was one of the things that helped me was breaking it down. I was like okay, as long as I keep doing the average number of classes each semester, I’ll be okay.

For Lisa Normandy, knowing that she did not want to fail a single course meant seeking help to ensure her own success.

(LM): I went to the Supplemental Instruction (SI) sessions that were offered at VCU. I took advantage of everything that was available. In my mind it just made sense because it just made school easier. Why would I study by myself when they are paying someone who has already taken the class to tell me what to study and how to study it and what to look for, how the teacher is going to test you, or what the teacher cares about. I found it so interesting that so few people went because I found it so helpful and it was so enlightening because I found I didn’t have to study after going to the SI session for difficult classes. People would just show up before the test but if you go (to SI sessions) like you’re supposed to, it’s like guided reading.

Institutional Influences—Academic Advising

The role of academic advising in their college completion journey elicited the most ardent responses from the participants. While half of the participants felt that academic advising played a positive role in their college completion experience, the other half felt the opposite. Heather Anderson, Gabrielle Carroll, Jackie Hall, Trent Mesner, and Michelle Miles all had positive academic advising experiences.

(HA): I think they were the reason why I completed (on-time), they were guiding me. I don’t remember exactly how many academic advisors I had but (there was one who helped) when it came time to declare my major. She was the one that helped me with the career center, with the research for different majors and the requirements. Once I did it (chose a major), I was passed on to a different academic advisor so that I could see what classes to take and they would show me, these are the classes that you are missing.

(GC): I would say I had a good experience with my advisors. I feel like I had. It was good that I did my part and was responsible and looked to see what classes I needed. So I went in prepared. I didn’t go in there and just expected them to know everything. But I do remember a couple times having questions and being unsure what path I wanted to go through and I remember an advisor being helpful with making some calls and trying to see if I really needed to take this class or not.
Jackie Hall felt that her positive academic advising experience was a direct result of the intentions set by her department.

(JH): I don’t know how advising goes in other programs, but Forensic Science requires that all their majors see them, and I think it starts junior year. You have to see a core faculty member starting at the junior level, so you’re not getting advising from a general advisor. You are not seeing one of the university college people. You are seeing one of your forensic science faculty to get your advising. I am not speaking ill about university college advising because, up until that point, you probably don’t know what you want to be when you grow up. I think forensic science has really got that right. And so you have to see them. If you don’t they put a hold on your account. That’s how they enforce that. And so for me, I think that is a great way to do that four year thing. They see you. They talk to you about what you want to do. Here are the classes you have to take. There are two tracks in the undergraduate program right now, biology and chemistry. Oh you want to do DNA, then you need to go biology track. Here are the classes you have to take. It is very well delineated. It’s written out in the bulletin. It is very checklist oriented. It is very obvious what you have to do. And classes are offered fall, and spring, the way they have to be for you to succeed in four years. And if you’re off track, they’ll help you. They’ll offer it in the summer time.

Trent Mesner also felt that his departmental advising made the difference:

(TM): The Engineering school is excellent at laying out, they’ll layout what they think your four years will look like. If that’s not what your four years looks like, those were professors are really good at helping you figure out what order do I need to do things in.

Michelle Miles attributes her positive advising experience to her program advisor and the honors college advising.

(MM): My advisor was the reason I got through in four years. She is the person who is in charge of the guaranteed medical program and she also advises freshman students that are in the honors college. When I was a freshman, her office was on the first floor of the building that I lived in and it was open door. If you needed to talk to her, she would make time to see you. I could email her, I could send her a note, and she would answer my questions on whatever they were. From the first day as a freshman she hands you your graduation worksheet. This is how it is, this is how it works. You have list A and list B, and you pick so many things from each, and it is really not intuitive. A lot of students don’t have that advising situation where they explain from day one as a freshman, this is what your worksheet is, if this is not completed in four years, you will not be walking at graduation.
The two participants who played competitive team sports for the university and also had positive academic advising experiences. Alanis Tomlinson share the following explanation of her experience with advising:

(AT): You have an athletic academic advisor and you meet with that person all the time. And then I met with my advisors within my major every semester. I think (the discussions with political science advisors) kept me more engaged because I felt more committed to do well for them too. If they were going to take their time to spend with me, I darn sure wasn’t going to go and do a bad job in any of their counterparts’ classes. And I took their advice to heart. I really wanted to know what classes were going to be the best for my development but also a really cool learning experience. The athletic academic advisor’s role was more are you on track to take everything that you need to? Are you going to get into this class? Does this class interfere with practice? Our athletic academic advisors gave us a print out of exactly what we needed to graduate for our majors. So, I had the record of exactly what I needed to complete and I would use that when I would talk to the teachers and say I can take the classes in this range, what do you think is the best?

The participants that reported having a negative experience felt as strongly about their position as the participants who reported a positive experience.

(JA): I went to one meeting with an advisor and to me it wasn’t particularly helpful. I took it upon myself to advise myself throughout the year. I figured out which courses that I needed to take as a prerequisite and then made sure I had those complete first before I went on to other courses.

(SC): It would have impacted my college completion (in a negative way) had I let it get to me. It was terrible. The university college does all the advising for freshman and the advisor that I had, I was basically on an assembly line with all the other freshmen that he had. So I would get called in there, I think I had to see him three times in a semester and he basically was just like—“So how is this going? Do you like this class? How’s this going? Okay, you’re good. We’ll register you for these classes then I’ll see you in a few weeks”. There was no real support there. I mean, he was basically someone that I could just ask questions but I had to actually get into his office to get an appointment to ask any questions because he wouldn’t respond to emails or anything. That and he just didn’t know the policies and he just wasn’t very familiar with the classes that I needed to take.

(UG): I have never had good experiences with academic advisors at any point in high school or college. They were like “check the website, look at the book.”

(AL): I think they tried to help but I am not sure that they were really a great impact. I think they were just students, who kind of just check, check, check, not really talking about it or asking
questions or just anything. It was just kind of formalities, “check this, okay, you came to the appointment, great.”

(IG): They are awful. I think a large part of it is that they use graduate students. It seems like they don’t go through education themselves about advising so they don’t necessarily know what to advise on other than going off a sheet of paper. So when a student comes in with actual real concerns, they get this look of a deer in the headlights and they don’t know what to do. So I went to a professor, and asked for help because they didn’t know what they were talking about half the time. I just went to them to sign off on the paperwork. I said, “This is my plan, here you go, look it over. Ya, I know it looks good, sign off.”

For Kara Jones, it was about having control over her own process:

(KJ): I was the one that academically advised myself. So, I made sure that the credits that I was going to be taking in France were going to transfer back to what I needed at VCU. And I was able to complete two majors and a minor in the four years because I worked it to where I could. If I had let someone else advise me, I probably wouldn’t have been able to do that. But because I was motivated enough to say, I needed to get it done in four years, I don’t want to have to pay for an extra year in college and I still want to study abroad, I’m gonna make sure it happens. I personally don’t trust anyone to advise me other than myself.

Institutional Influences—Registration

Two primary themes emerged among the participants regarding registration as a contributor to on-time completion. For the first group, registration was a non-issue since they had priority registration because they were either in the honors college, a student athlete, a resident assistant (RA), or part of the Student Government Association. Helana Braithwaite summed it up:

(HB): I was lucky because I was enrolled in the honors program at VCU so after the graduate students, we were allowed to set our own schedule which was very helpful. It was a big perk.

(VK): I was in the honors college. I was very fortunate in that respect. I never had a challenge. I don’t think I ever had to get an override for a class being full.

(TM): One of the big things is that in the honors program, I got priority registration.

Student athlete Barbara Sanchez:
(BS): I think we had priority registration. I think it was like a couple days before, the week before. So that was a huge plus because that helps especially with the coaches. That helps with the practice time, especially with the trips and all that. I can’t remember exactly but I know we did get to select classes prior.

SGA member Mark Winston:

(MW): I was extremely lucky being part of SGA because one of the benefits is you get to register with the honors college. As soon as they got done, we were next, and then the seniors and I did SGA the entire time I was in college so I never had to worry, that is another thing I was completely grateful for, I never had to worry okay, I can’t get into this class because it is full. The only time I ever experienced that was, I think I didn’t realize and I may have just missed registration day, and so I started signing up for classes with the seniors and there was one class, an upper level class that I was going to take that semester because there was a particular professor teaching it and it was full. The seniors filled that spot and so I was just like okay, I’ll just take it next semester.

The second group of students ensured that registration was not an obstacle to their on-time completion by being prepared to sign up for their classes as soon as registration opened.

(LN): I remember registration was like an event. I think that was just the nature in our dorm. We would all wake up at 4:00 am, get online, and be ready to register right when it was registration. It was a very group oriented adventure because everybody was in different majors.

(JA): I was one of those people who got on the day I was able to register. There were times when it was very difficult to get into the system and the courses that you wanted to have on the date that you wanted would be full and so you would have to select a different one but it didn’t hinder my graduation.

(SC): I did better than most because I was pretty diligent in working my schedule around and having a back-up plan in case I couldn’t get into certain classes. It is kind of a waiting game. Everybody has to get on at 8 in the morning on the day of registration, put in all your numbers, and keep hitting refresh and click submit and hope yours get in before anybody else’s. And a lot of my friends weren’t as quick as I was so they were getting locked out of all the classes that they needed and there just wasn’t room in a lot of classes that they needed.
Institutional Influences—Professors and Administrators

While many of the participants expressed having good relationships with certain professors, none of them expressed the belief that those relationships contributed to their on-time completion. Mark Winston expressed the general sentiment among participants:

(MW): I would say the big difference between college and high school—with high school you see them every day or every other day and so you can build a rapport and the classes are small. In college obviously, that is not the case. You can sit in a 300 hundred person lecture hall and be a number. My first year I had a 300 person lecture class, and a really great professor and so because he was in political science, I started taking all of his classes and the higher up you get, the smaller the classes get, and so I was able to build that kind of rapport with him. And some of my homeland security classes, the same thing, when I go into their office, they know who I am. It is not like I have to remind them—I’m in this and this class, they know. I wouldn’t say they had any effect on me for completion or anything like that but on a personal level, it was someone I could go and talk to about how I was doing in their class or in the program, things like that.

Institutional Influences—Scholarships/Financial Aid

For many participants, it was the financial cost of not completing on-time that spurred them on.

(KJ): Well I was determined to finish in four years because I am paying for my college. So if I am paying for it, I want to get in, get it done as soon as possible so I don’t have the debt.

(BN): I was thinking I want to get as close to four years as possible. Just cause, you can drag it out and I could just, it sounds awful but I was like, the longer it takes me to get done, the more expensive it’s going to be and I don’t want to dig out of that hole and you know what I mean? At some point you have to stop digging.

(PR): So, I think the biggest factor in keeping me on track in college was I was very cognizant of the fact that you know, people say time is money but in college, time really is money. Because I was the first person in my family to go to college, I was especially aware of that fact. No one saved money for me for college. There were loans, and the longer I stayed, the more those loans would be so, I was pretty self-aware.
For Helana Braithwaite, Gabrielle Carroll, Ursula Gary, Opal Huntington, Vickie Kent, Bridget Nomdarkhon, and Brent Wallace, the fact that they had scholarships that were tied to on-time completion, acted as motivator to stay on track.

(UG): I was really lucky. I got a scholarship. I am sure having the added pressure of knowing that I couldn’t fail because I had a scholarship. It was all four years as long as you were still eligible.

(BW): The scholarships had a GPA requirement so if I didn’t keep the grades up, they would go away but they also had a timeframe component to them as well, that there were there not for as long as I happened to stay in school and keep the grades up but they ended at four years.

(OH): I needed that scholarship. My parents never would let me sink but they expected me to get good grades to keep that scholarship. It wasn’t a pride thing, it was more like live up to your potential. You know, if you can do honors courses in high school, you can keep your scholarship in college.

For Heather Anderson, the financial aid she received through the university made a substantial difference in her ability to complete on time.

(HA): That (financial aid) is what helped me get through school—grants and the different loans, some subsidized and some unsubsidized. I guess my family being poor, I guess I have that to be thankful for, because we are such a big family and according to the different standards, we don’t make enough for such a big family. I thought we made okay money and we made enough to survive but I guess to normal American standards it wasn’t enough. So that is the reason I was able to make it through college financially. So the grants were a help and the loans I’m still paying back.

(JH): I am thankful for the financial aid process. I can definitely say that helped me to complete. If I had had to work, and pay for college out of pocket, I would probably just now be starting my college career. If I would have had to come up with that money on my own, I would not have taken out loans from a bank in a private situation to go to college. I have relied on the government financial (aid) to do that.

(KJ): Well, if I hadn’t have had financial aid, I probably wouldn’t have been able to go to college at all. I received a Pell grant. I received a Virginia gap grant, which had a huge impact. And when I made the dean’s list, I also received an additional stipend from the university that helped a lot. But, if I hadn’t received any of that, I probably wouldn’t have gotten through college to start off with. Now it would have been really nice if there was more funding for students who can’t afford it because I still had to work in order to cover the expenses that the
grants and financial aid didn’t help with. I received a couple of scholarships in high school that helped with my freshman year but after that it was kind of downhill from there.

(PR): I did have financial aid but not scholarships. The loans were a motivator. I didn’t want any more than I needed to be hanging over my head when I graduated. I would rate that as a big influence in my determination to graduate close to on time.

For Mark Winston it was his father’s GI benefits that helped him make it through on-time:

(MW): Because of the economic crash, the money that my parents had saved for me to go to college that was supposed to last four years, I spent in two and so I needed to get. They had it all in secured bonds and stuff like that so when the stock market just plummeted and fell out, they lost pretty much half of what they had saved. And so, what happened, my father is in the military, and this was shortly after the Montgomery GI Bill was passed and they found out the information about that (went into effect in 2009) and he transferred his GI bill credits to me and so that allowed me to go to college for free and pay for everything. So as far as the economic part in helping, that really is the only way I could have afforded to go without getting student loans and being thousands of dollars in debt like I know a lot of my friends are. At the beginning there was no real assistance but then halfway through going into my junior year that assistance was huge and helped me finish.

Self-identified Top On-time Completion Contributor

Participants were asked to name the top contributor to their on-time graduation. What emerged were two categories of contributors—internal vs. external factors.

In terms of internal factors, the participants described aspects of their personality such as focus, determination, motivation, drive, stubbornness, organization, competitiveness, and pride.

(HA): I had a lot of influences but I would say my focus and my determination really did it.

(GC): I think it was all about my own personal motivation and drive.

(SJ): I think it was just my self-determination. I just wanted to be that person, done on time, graduate on time with my class when I entered. I want to say that’s the biggest thing that influenced me to graduate on time. That was my goal. I have always set goals and for the most part I usually complete it somehow.

(FH): Determination is the number one thing.

(MW): I think ultimately it was kind of a self-motivation and the organization.
For the participants who credited external factors as the top contributor to their on-time completion, two factors were mentioned the most frequently in their responses—family support/expectations and the financial cost of college. Helana Braithwaite, Everly Delapena, Opal Huntington, Vickie Kent, Andrea Locklear, and Brent Wallace all mentioned their family.

(HB): My parents and their support, financial support. And it wasn’t really a question of if you’re going to graduate on-time, it was you are (going to graduate on-time). Expectations.

(ED): I am going to think about this critically and I am going to say that it would be my upbringing because I wouldn’t be making any of the choices that I made in college if I didn’t come from a privileged upbringing with people always telling me what you do after high school is you go to college and then you graduate college and you get a job or whatever. So I think just that sort of structural upbringing is probably the biggest influencer.

(AL): My parents. Well I guess twofold, it was my parents and the money. It was my parents talking about the money, you know. Saying, hey, you’re gonna have to take out a lot of loans if you want to stay there. And kind of scaring me into leaving so they were really kind of behind that.

(BW): If I had to sum it up in one word, it would have been expectations of mine, of my parents, of the scholarship committees.

Sharon Campbell, Danielle Garth, Paris Robinson, and Chelsea Zehrig mentioned the financial costs of continuing in college beyond four years.

(SC): Knowing that it would be a lot cheaper to finish quickly. Motivation, I just don’t want but so many loans and there was always the rumor that you couldn’t get federal financial aid if you went more than 4 years.

(DG): My money was running out. Even with working during the summer and the school year. I had parents helping, I had scholarships, grant money as well, it still did not cover the costs.

(PR): The most important factor was money. And I would say that a very close second was the, I just like to do things, like I am on time for things and I think that I never really entertained the idea of graduating late.

Only one participant, Josie Azouri, named entering college with early college credits as her top contributor to on-time completion.
(JA): A contributor for me completing early was having those AP courses because I didn’t have to take certain courses in college and so I tested out of certain courses. That is what contributed to me completing college on-time.
CHAPTER 5 - DISCUSSION AND IMPLICATIONS

Findings as they relate to the Research Questions

The purpose of this study was to address the following three research questions: 1) What are the most significant factors that determined on-time graduation for students? 2) Are there specific steps students take during their high school and/or college careers to ensure on-time graduation? 3) What contribution if any, does participation in an early college credit program make to on-time graduation?

In addressing the first research question—“What are the most significant factors that determined on-time completion?”, the findings of this study seem to suggest that there are indeed some significant factors that determined on-time graduation for the participants in this study. When asked to identify what they perceived to be the most important contributor to their on-time completion, half the participants identified internal factors or personality traits while the other half identified external factors.

The internal factors that participants most frequently identified as contributors to their on-time completion were determination and motivation. The external factors that participants most frequently identified as contributors to on-time completion were family support/expectations (both others and self) as well as having the money to meet the financial cost of college. It is important to note that the internal and external factors are not necessarily exclusive as several participants mentioned both but since they were asked to identify the most important contributor, they were required to name one.

These findings of both internal and external factors driving students to on-time completion may suggest that students with personal drive and motivation have the potential to complete their
degrees on-time regardless of the challenges or obstacles they face during their academic careers such as a medical challenge, poor advising, or a challenging registration process. The students which may face the most risk for not completing on-time are the ones that are relying on external factors such as family support or expectations to drive them towards the finish line of on-time completion.

In addressing the second research question—“Are there specific steps students take during their high school and/or college careers to ensure on-time graduation?”, the findings of the study indicate that during high school the participants were primarily focused on being accepted into college. Only five (16%) of the participants had family members discuss on-time completion with them while in high school. None of the participants had on-time completion discussions with friends or high school personnel while in high school. And while the majority (76%) of participants participated in early college credit programs, those courses were viewed as preparation for the rigors of college rather than a tool to on-time completion. What is interesting is that despite the lack of discussions in high school around on-time completion, the findings indicate that almost all (96%) of the participants entered their freshman year with a 4-year completion mindset—they simply assumed that they would finish their 4-year degree in 4 years.

For many of the participants, in particular the first-generation college students in the study, the realization that not all students finish their degrees in four years is a discovery they make early in their college career. However, the interesting phenomenon that appears to occur is that after this discovery of failure to complete on-time by others, these students appeared to make a choice of on-time completion for themselves despite the influences of some of their peers.

A review of the participants’ college transcripts provides one indication of a specific step these students took during their college careers to ensure on-time completion. The transcripts
showed that most of the participants strived to maintain a 28 to 30 credit course load each year which in turn would lead to the 120 credit hours required to graduate. Even the students with the most early college credits at the start of their freshman year, Michelle Miles, Shantal Raven, Vickie Kent, Gabrielle Carroll, and Rose Lee, completed 36, 38, 32, 31, and 28 credit hours respectively in their freshman year.

While many of the participants (73%) withdrew from courses during the course of their college completion, there were very few course failures among them. And finally, the majority (70%) of the participants took advantage of summer sessions to take courses and stay on track for on-time graduation.

In addition to maintaining full course loads each year, all of the participants indicated that they employed personal strategies to ensure that they were on track to graduate on-time. For most of the participants, the personal strategy started in their freshman year and continued through graduation. The most frequently cited strategy utilized by the participants involved identifying their program requirements for graduation at the beginning of their freshman year and mapping out what they needed to take each semester in order to graduate on-time. All the participants used the tools and information they had available such as bulletins and on-line resources to map out their path to completion of their degree. They also tracked their own progress along the path as they completed their courses.

While half of the participants felt that academic advising supported their personal strategies for on-time completion, the other half felt the opposite. Some participants went as far as to suggest that they succeeded despite poor academic advising. This finding suggests that the genesis of on-time completion begins in freshman year and that students who finish on-time effectively employ their self-created plan to get them to graduation. It is also interesting that the
plan that the participants established for themselves was flexible enough to incorporate changes in their program of study. Eleven of the 30 participants (36%) indicated that they either did not know what they wanted to study when they entered college or they changed their major during the course of their degree completion.

The study did attempt to address the final research question which was—“What contribution if any, does participation in an early college credit program make to on-time graduation?” In reviewing the transcripts of the participants it was determined that of the 23 participants who entered their freshman year with early college credits, 10 of them (43%) applied their early college credit toward the total 120 credits needed for graduation. All the other early college credit holding participants met or exceeded their 120 credit hours through courses taken during their college careers. Therefore, it can be concluded that early college credit can contribute to on-time completion but does not appear to be a requirement for on-time completion. That said, there appears to be other intrinsic contributions to on-time completion that arise from participation in early college credit programs such as the academic self-esteem generated by participation in rigorous course work.

**Findings as they relate to the Literature**

As indicated in the literature review section of this report, the study that most informed this research was Adelman’s *The Toolbox Revisited: Paths to Degree Completion from High School through College* (2006). In his work, Adelman isolated four factors that appeared to consistently contribute to undergraduate degree completion: 1) the earning of 20 or more credits in the first calendar year of enrollment; 2) the higher the ratio of non-penalty withdrawals and no-credit repeats to all courses attempted, the less likely the student would complete their degree; 3) students who completed at least four credits during summer terms were more likely to
complete their degree; and 4) above average (top 40%) high school academic performance in terms of grades and curriculum content, and no delay of entry after high school also positively influenced undergraduate degree completion. The findings of this study appear to support the four factors that Adelman isolated.

In terms of the first factor, all participants in the study earned more than 20 credits in their first calendar year of enrollment.

In terms of the second factor, while a majority (73%) of the participants in the study had a least one non-penalty withdrawals, the ratio of non-penalty withdrawals to all courses attempted was low. None of the participants had no-credit repeats.

The third factor identified by Adelman was also supported by the findings of this study since 21 participants (70%) did take courses during the summer sessions. However, it should be noted that some of the study participants took as few as 3 credit hours in the summer and 9 of the participants took no summer session courses at all and yet all managed to complete on-time. While summer credits may help, especially if a student has withdrawn from a course in the fall or spring semester, it is clearly not a requirement for on-time completion.

The fourth and final factor identified by Adelman also appears to be supported by the findings of this study. First, all the participants entered their freshman year in the fall immediately following their graduation from high school thereby supporting Adelman’s no delay of entry post high school. However, the findings of the study demonstrate a weaker alignment with the above average high school academic performance that Adelman includes in this factor. Nine of the participants had 3 of fewer advanced placement or dual enrollment credits, a measure of academic rigor, and yet they completed their degree on-time along with the more accomplished students. However, it should be noted that while a participant may not have earned
early college credit, they may still have participated in early college credit courses during high school but simply failed to earn a high enough grade to earn a college credit. Since high school transcripts were not reviewed for the purpose of this study no definitive conclusion can be made on this point.

The student engagement literature as it relates to student persistence was also reviewed for this study. Three pre-college persistence factors and three in-college persistence factors that have the potential to relate to on-time completion were identified as falling within the scope of this study. These factors are: 1) pre-college self-identified academic ability; 2) pre-college family support/encouragement; 3) pre-college extrafamilial (institutional) support/encouragement; 4) in-college informal faculty interactions; 5) in-college participation in student clubs, organizations, and/or athletic teams; and 6) in-college strong academic performance defined for the purposes of this study as maintaining a 3.0 or higher GPA for all four years.

To determine pre-college self-identified academic ability, participants were asked how they viewed themselves academically during high school. They were given a choice of below average, average, honors, and above honors. Of the 30 participants, 26 of them (86%) self-identified as honors or above honors. This finding demonstrated that most of the participants exhibited the pre-college academic self-esteem that Nora (2004) identified as an influential psychosocial factor for persistence. The fact that such a large portion (86%) of the sample demonstrated academic self-esteem suggests that this factor may also play a role in on-time completion.

The pre-college family support/encouragement factor and the pre-college institutional (high school personnel) support/encouragement factor saw lower levels but still substantial numbers of positive responses from participants. Twenty-three of the 30 participants (76%)
indicated that they received pre-college family support/encouragement, while 19 of the 30 participants (63%) indicated that they received pre-college institutional support. These findings suggest that while pre-college family and institutional support may not be essential, they may play a role in on-time completion.

Only 17 of the 30 participants (56%) indicated that they had informal interactions with faculty—identified as a persistence factor by Pascarella & Terenzi (1979)—during the course of their degree completion. This suggests that while informal interactions may contribute to persistence and therefore degree completion, they may be less relevant to on-time completion.

The final two student engagement persistence factors that are intended to measure the “sense of belonging” identified by Hurtado & Carter (1997) were in-college participation in student clubs, organizations, and/or athletic teams and in-college strong academic performance. Of the 30 participants, 26 (80%) were involved in a student club, organization, or athletic team during the course of their degree completion. However, only 17 of the 30 participants (56%) maintained a 3.0 or higher GPA while making their way to on-time completion. These findings seem to mirror Hurtado & Carter who found that students’ GPAs in both the second and third years of college were not significantly associated with students’ sense of belonging and therefore persistence. The findings seem to suggest that while students who graduate on-time must perform well enough to move through their curriculum to graduate, a strong in-college academic performance may not necessarily be a driver to on-time completion. However, participation in college life that creates a sense of belonging may play a role in keeping the student engaged in college and focused on the finish line of graduation.
A Grounded Theory for On-time Undergraduate Degree Completion

A grounded theory for on-time undergraduate degree completion emerged from the findings of the study.

First, preparation for on-time completion begins before college matriculation. High school students who develop ‘academic self-esteem’ by participating in an honors courses or an early college credit program in high school enter college with the belief or personal vision that they can complete their degree in 4 years. However, in cases where the student matriculates without ‘academic self-esteem’ directed and intensive institutional support is an effective proxy.

Second, students appear to enter college with the mindset that their 4-year degree will be completed in 4 years regardless of whether or not they engage in on-time completion conversations prior to matriculation. Since it is only after entrance to college that students discover that not all students complete their degrees on-time, it is crucial that students are engaged in an on-time degree completion conversation early in their college career.

Third, a student must be self-motivated or determined to complete on-time. They must have an inherent reason for wanting to reach that goal post. However, since the findings indicated that motivation can be internal, external, or both, institutional support can be used as effective tool to develop these qualities where needed.

Fourth, if students are to complete their undergraduate degrees on-time, they must develop a personal plan for accomplishing that goal at the very beginning of their college careers. This plan should be incorporated into the student’s academic advising sessions and updated as they acquire the credits required for the completion of their degree. While many of the study participants developed their own plans other participants relied on departmental assistance to help them develop their plan for completion. It is through the creation of this plan
that students acquire the understanding of the importance of maintaining a sufficiently heavy course load during the semester and making up credits when needed during summer sessions.

And finally, students should be strongly encouraged to engage in campus life by participating student clubs, organizations, and/or athletics. Participation in campus life encourages persistence and therefore supports on-time completion.

This theory is based on the assumption that students have obtained sufficient financial support to complete their degrees. Clearly, if a student lacks parental financing, self-financing, scholarships and/or financial aid to cover the cost of their education they will be unable to complete their degrees on-time.

The model in Figure 1 (page 73) provides a graphic representation of this theory. As indicated in the model, personal and/or institutional influences in high school result in students entering college in one of four states. The first state, ‘No Preparation’ means the student has no personal vision for on-time completion, no academic self-esteem from lack of participation in rigorous course work; and no familial or institutional encouragement spurring them on to complete college on-time. The second state, ‘Personal Vision’, indicates that the student has a personal vision of their ability to complete college on-time or a ‘completion mindset’, but lacks encouragement and academic self-esteem. The third state, ‘Personal Vision and Encouragement’ indicates that the student has both a personal vision of on-time completion and the encouragement to do so but lacks academic self-esteem. And finally, the fourth state, ‘Personal Vision, Encouragement, and Academic Self-esteem’, represents the student that is entering college fully prepared and ready to complete their degree on-time.
Figure 1 – Model for On-time Completion
The next section of the model is a line that represents college matriculation which all students must cross in order to complete their degree. Obviously, if the student never matriculates, there can be no degree.

The matriculation line is followed by the financial support block. Regardless of the ‘state’ of the student, after matriculation, all students must have the required financial means to pay for college regardless of whether the source of funding is personal, institutional, or combination of both.

After the financial support block, the paths of the students vary depending on their ‘state’ at matriculation. Institutional influences act upon students in the first, second, and third states, to assist them in the creation of a personal vision and academic self-esteem. The student that is fully prepared needs only to pass through the final block which is the creation of a personal strategy for completion and campus life engagement. If institutional influences act on a student during their freshman year to create a state of readiness in each of the five needed areas: financial support; personal vision; academic self-esteem; personal strategy; and campus engagement, that the student will be on-track for on-time completion.

**Implications for Practice at the High School Level**

There are implications for practice at the high school level. The first implication is the need to foster ‘academic self-esteem’ in students by encouraging them to challenge themselves in rigorous courses such as the honors curriculum and early college credit programs. Since less than half of the participants who entered their freshman year with early college credits actually applied those credits to their degree completion requirements, it is appears that students are using early college credit programs for preparation rather than acceleration.
The second implication is the need to support an on-time completion mindset among students considering college. Many of the participants referenced high school guidance counselors and/or high school programs as their primary source of college information. Further, the participants noted that all the information they received was geared toward college choice and admission and rightly so. That said, an introduction of the on-time college completion conversation could make a difference to how students view their college careers prior to matriculation. The findings of this study indicated that almost all the participants entered college with an ‘on-time completion mindset’. While further research would be needed to determine if students who failed to complete on-time did not have a similar mindset, the findings suggest that fostering an on-time completion mindset prior to the start of freshman year could lead to more students completing their degrees on-time.

Implications for Practice at the University Level

The findings of this study have several implications for practice at the university level. The first implication for practice at the university level is the fostering and supporting of an ‘on-time completion’ mindset among freshman. While almost all the participants started their freshman year with the mindset that they would be finishing their degrees in four years, none of the participants indicated that they received any institutional support or encouragement for finishing their degree in 4 years. Freshman orientation or the University 101 course that most freshman are required to take may present perfect opportunities to introduce a conversation about on-time degree completion. Reaching out to students on this topic as they begin their college career will give these students the chance to begin with the end goal in mind and to take steps to engender their own success.
The next implication is ensuring that all freshman students understand how to develop their own plan to complete their degrees on-time. All the participants discussed personal strategies they used to develop a plan and monitor their progress to completion of their degrees. Participants either received worksheets from their departments or developed their own personal worksheet or system. What was consistent was the fact that they all had a tangible method for mapping their path to completion and for tracking their progress which they utilized consistently. Freshman advising may present the earliest opportunity to introduce freshmen to the process of planning the four years of their degree and to teach them how to track their progress. As several of the participants changed their majors or were undeclared when they entered college, a personal plan for completion is clearly still helpful even when a student has not chosen a specific degree.

The next implication for practice is helping freshman to discover and internalize their motivation for completing their degree through seminars or testing that could be offered through the student career counseling center. Many of the participants indicated that their drive and determination helped them to push through the challenges they faced during the course of their degree completion and enabled them to stay on track to complete their degrees on-time.

Another implication for practice is the need to increase the efficacy of academic advising for students not enrolled in the Honors College. Almost half of the participants had a negative view of academic advising. While that means that half of them were satisfied with the advising they received, a 50% efficacy rate should be seen as unsatisfactory. Effective advising has the potential to increase student satisfaction, retention, and completion. Several participants who were part of the Honors College mentioned the excellent advising they received and voiced their
consternation that their fellow students who were not in the Honors College did not receive the same quality of advising.

The final implication is the need for VCU to continue to work with K-12 to encourage early college credit alignment with VCU course offerings. While the majority of the participants did not apply their early college credit to their degree requirements, some participants did use their early college credits to manage their course load and to absorb course withdrawals or manage personal challenges.

Implications for State Education Policy

The implications for state policy apply to both K-12 and higher education. First, continued state support of early college credit programs at this time will ensure that K-12 is able to continue to make these offerings available to students. The findings of the study demonstrated that while not all students may use these credits to reduce their time-to-graduation, when possible, they do use their early college credits to manage their course loads and to ensure that they complete on-time.

Although the intended objective of these early college credit programs is to facilitate reduced time-to-graduation for traditional students, it is important to remember that the traditional student is usually in grade 11 and only 16 years old when they first enroll in an early college credit course. By the time that student has officially selected their major in their freshman, sophomore, or junior year, their chosen career may have changed and the early college credit courses they took in high school may no longer be relevant to their program of study. For example, Sarah (a fictional student) decides in grade 10 that she wants to be a forensic scientist so she signs up for the dual enrollment program in honors biotechnology at the Chesterfield Technical Center for grade 11. She does well in the course and earns 6 dual enrollment credits
but decides that a career in forensic science is not for her after all. In grade 12 she takes dual enrollment English and AP Psychology and discovers that her preference and aptitude lies with the humanities and social sciences. Once Sarah matriculates, she discovers her passion is actually clinical psychology but unfortunately, her dual enrollment credits in biotechnology cannot be applied to her degree as her program of study has specific science requirements that she must fulfill. Sarah is unable to use her biotechnology dual enrollment credits to graduate early but had that program not been available to her, she would have been unable to explore that career option prior to her college matriculation and ended wasting even more college credits by spending a year in the wrong major.

That said, it is important that the state encourage K-12 and postsecondary institutions to work together to ensure that high school early college credit offerings are in-line with the general education requirements for the first two years of college. In do so, the state will ensure that students have the best chance of making their early college credits count towards their degrees.

At the postsecondary level, the state should consider becoming actively engaged in developing incentives to encourage students to complete their degrees on-time as both the state and the students have much to gain financially. These incentives could include partial loan forgiveness, scholarships, or non-financial mechanisms such as post-graduation state supported work placements. The state would need to work in conjunction with the postsecondary institutions to ensure that these incentives and their purpose are integrated into the culture of the institutions.

The importance of having the financial support to complete college from all possible sources was repeatedly emphasized by the participants. Further, the findings of the study indicated that students who received scholarships that were restricted to four continuous years of
study were highly motivated to complete on time. That suggests that a possible opportunity exists for state policymakers to provide financial incentives for on-time completion through state loan and state grant programs. These financial incentives could be offered in addition to existing financial aid allowances to ensure that the additional funds do not threaten a student’s progression.

And finally, state policy holders could require that all public four-year institutions, regardless of mission, work to improve their four-year graduation for FTFT students to a minimum of 60% within a 5-year time period. Each institution’s progress toward that goal could be monitored and published so that parents and students become aware of the existing graduation rates at all of the Commonwealth’s public higher education institutions.

Limitations

There are a number of limitations to this study that should be noted. First, since making generalizations is not the main purpose of qualitative research, it stands to reason that the findings of this study, whatever they may be, will not necessarily be generalizable to a wider population. Further, since the sample was not randomly selected and may not necessarily be representative of the population of the chosen institution, the generalizability of the findings to that institution’s population should also be questioned. That said, the approach of this study was to treat each participant of the study as an expert in what they have accomplished—completing their degree in 4.5 years or less. As such, their experience should provide valuable insight to those interested in the perspectives of on-time graduates.

A second limitation of this study lies within the chosen method of data collection—interviews. When interviewing is used as a data collection method, the researcher is the main instrument which creates the potential for bias not only in terms of the interview protocol but
also in the application of the inductive reasoning applied to the data in the form of the words of
the participants. To assist in addressing this limitation, the initial interview protocol for this study
was reviewed by students and a professor during a doctoral qualitative methods class in spring
2011. During that class, the protocol was tested in a small in-class project of six participants.
After minor revisions based on the initial interviews of that project, the protocol was found to be
satisfactory by both the researcher and the professor. However, a central tenet of the grounded
text methodology is that the researcher adjusts their inquiry as each additional interview
presents new information. To that end, minor revisions were incorporated into the protocol when
a participant presented new information that the researcher deemed worth considering for
subsequent interviews. For example, after one participant mentioned a personal strategy they
used to track their progress to graduation, a question on personal strategies was incorporated into
the protocol. Please see Appendix C for the version of the protocol utilized at the start of the
study and the final version of the protocol.

To further assist in addressing the limitations of interview data collection, the interviews
for this study were recorded and transcribed to assist in obtaining and ascertaining the
participants’ comments accurately.

A third and final limitation of this study lies within the tendency of human recollection to
be less accurate over time. It is highly likely that participants will experience a greater challenge
when attempting to make curriculum recollections about their academic experiences from their
freshman and sophomore years than their junior and senior years. To address this potential
limitation, official college transcripts were obtained for all the participants in the study to
provide verification of the information provided in the interview. The transcripts also contained
certified information on date of entry into the university and date of graduation from the
university thereby providing confirmation that the participant did complete their degree within 4.5 years or less.

**Conclusion**

The grounded theory methodology used for this study was an effective mechanism for analyzing the narrative data generated by the semi-structured interviews of the 30 participants study. The analysis determined that there were distinguishable contributors to the on-time undergraduate degree completion of the participants in the study.

The findings demonstrated that the participants’ path to on-time completion began in high school where they developed a personal vision of on-time completion and academic self-esteem through a rigorous curriculum. Once in college, the participants supported their personal vision by developing a plan for on-time completion and monitored their progress as they completed their degree requirements.

While family support and encouragement played a role in many participants path to completion, it was found that there institutional support was an effective proxy for those participants that lacked such support.

The findings demonstrate that there are opportunities for both high school and university administrators to participate in preparing students to graduate on-time. It is clearly in the best interest of the student, their families, and the state that they do so.

However, further research is needed to test the findings of this study as the sample size is quite small and participants self-selected into the study. Both VCU and the Commonwealth would benefit from the conducting of a large study with the cooperation of multiple public institutions in Virginia. Should further research support the findings of this study, there is an opportunity for state policy to incentivize students to on-time completion by implementing
incentive mechanisms such as partial loan forgiveness, scholarships, and state supported work placements.

There are opportunities for future research as a larger study involving multiple public higher education institutions in Virginia would provide an opportunity to support or refute the findings of this study. Further research into the acquisition and usage of early college credits towards graduation is also warranted to determine how these credits can be more effectively used towards their intended purpose of early completion. And finally, further research into the disparities between the advising provided to Honors college students and student athletes versus the advising provided to the average student could provide great insight into how the advising system could be improved to serve all students well rather than a select few.
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Murphy, M. M. (1999). Predicting college graduation: Are admissions test scores and high school performance measures adequate? (Ph.D., University of Illinois at Urbana-Champaign), 152. (9944945).


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Appendices
Appendix A – Study Information Sheet

Finishing on-time: A qualitative examination of contributors to timely undergraduate degree completion.

Thank you for your interest in this study; participation is completely voluntary. What follows is a brief description of the study and the information I will be collecting.

Description of Study:
Timely undergraduate degree completion is a challenging issue in Virginia and across the country. On average, less than 50% of Virginia’s first-time full-time (FTFT) students who attend 4-year higher education institutions complete their degree within 4.5 year (considered timely completion). With no clear indication of the most important contributors to timely undergraduate completion available, this qualitative study seeks to uncover those factors by posing the questions to FTFT students who successfully completed their degree within 4.5 years of the start of their undergraduate studies.

Nature of Information to be Collected:
Your participation will consist of a 45 to 60 minute interview during which I will ask you to recollect your thoughts about college completion during your high school and college career. I will also ask you to reflect on external influences such as parents and peers on your college completion experience.

With your permission, the interview will be recorded on a digital recorder. Once the interview has been transcribed, the recording will be destroyed. The interview transcripts will be stored in a digital file on my personal, password protected computer.

You will also be asked to sign a release form permitting me to receive an official copy of your undergraduate transcript. Official transcripts are required to verify information such as: time of entry, time of completion, and course loads. Transcripts will not be published and all identifying information will be redacted. The copy of the transcript will be obtained at no cost to you.

I will be using the information collected to write my dissertation—a requirement of my doctoral program in public policy and administration at VCU. The data collected and the final research paper may be used for public presentations or publication in journals or other print or electronic media. Pseudonyms will be assigned to all participants when interviewed and no personal identifying information will be included in the paper.

Should you have further questions about the study please contact me. My contact information is provided below. You may also contact my dissertation chair, Dr. Bill Bosher by email at wcbosher@vcu.edu or by phone at 804-827-3290.

Thank you,
Diane Vermaaten
Email: davermaaten@vcu.edu
Phone: 804-677-7529
Appendix B - Participant Recruitment Emails

(VCU GRADUATE STUDENT ASSOCIATION)

Subject: College Completion Study Seeks Participants

Dear Student,

A dissertation study on undergraduate degree completion seeks participants. The purpose of the study is to determine what helps students graduate on time.

To be eligible, you must have: a) completed your undergraduate degree in less than 5 years, b) entered a 4-year college within six months of your high school graduation, and c) completed your undergraduate degree between 2004 and 2011.

The interview for the project will last approximately 45-60 minutes and would be completed on the VCU campus at a time that is convenient to you.

Please contact Diane Vermaaten at davermaaten@vcu.edu to join the study. Your participation will be greatly appreciated.

Diane Vermaaten
dafermaaten@vcu.edu
Dear alumni,

A Ph.D. student in the L. Douglas Wilder School of Government and Public Affairs seeks participants for a dissertation study on undergraduate degree completion. The purpose of the study is to determine what helps students graduate on time.

To be eligible you must have:

1. completed your undergraduate degree in 4.5 years or less;
2. entered VCU within six months of your high school graduation; and
3. completed your undergraduate degree between 2004 and 2011.

The interview for the project will last approximately 45-60 minutes and would be completed at a time that is convenient for you.

Please contact Diane Vermaaten, who is conducting the survey, at davermaaten@vcu.edu to join the study. Your participation will be greatly appreciated.
Appendix C - Interview Protocol

(Initial)

Part 1 – Demographic/Qualifying Information

1. Gender: Male or Female
2. When did you graduate from high school?
3. Did you enter Virginia Commonwealth University within six months of your graduation from high school?
4. Were you a full-time student while you were completing your undergraduate degree?
5. Did you complete your undergraduate degree within 4.5 years or less?
6. How many credits did you complete during your first year of college?
7. Did you participate in a university sponsored study abroad program? If yes, how many credits did you earn?
8. During the course of your degree completion did you take any courses for credit during summer session or winter intersession?
9. During the course of your degree completion did you withdraw from any courses?
10. During the course of your degree completion did you repeat any courses?
11. During the course of your degree completion did you fail any courses?
12. Are you the first in your immediate family to attend college?
Part 2 - Open Ended Questions

1. High School Early College Credit and College Preparation Questions
   A. Did you participate in the AP, Dual Enrollment, or any other early college credit program?
   B. If yes, how many college credits did you earn while still in high school?
   C. If you earned credits, how many, if any, counted towards your degree?
   D. Did you participate in any college preparation programs?

2. Influences in High School on College / College Completion Questions
   A. Tell me about your thoughts on college while you were in high school.
   B. Describe the ways people in your life at that time such as parents or high school friends, discussed college with you.
   C. Describe the ways school officials in your life at that time such as teachers, guidance counselors, or coaches discussed college completion with you.
   D. Did anyone discuss college completion with you while you were in high school?
   E. What type of student did you consider yourself to be academically during high school—below average, average, honors, above honors?

3. Self-Determination & Personal Influences on College Completion while in College Questions
   A. What were your thoughts on college completion once you entered college?
   B. Did you participate in an “introduction to college course” during your first year of college?
   C. At what point in your college career did you start to think about college completion?
   D. If you worked while in college, what impact, if any, did working have on you finishing college in four years?
   E. Describe the ways people in your life at that time such as parents or college friends, impacted your college completion.
   F. Tell me about any family obligations or commitments you had upon entering college or during the course of your college completion.
   G. If any, describe how family obligations impacted your college career.
   H. Tell me about any social organizations or athletic teams you participated in during college and describe your role as a member of the organization or the team.

4. Institutional influences on College Completion while in College Questions
   A. Tell me about any external influences such as financial aid or scholarships that you believe impacted your college completion timeframe.
   B. How did your experiences with academic advising influence the length of time it took to finish college?
C. How did your experiences with registration influence the length of time it took to finish college?
D. In what ways if any did college officials such as professors, program coordinators, program directors, research assistants impact the length of time it took to finish college?

5. What do you consider to be the most important factor in why you were able to complete college in four years and why?
INTERVIEW PROTOCOL

(Final)

Part 1 – Demographic/Qualifying Information

1. What is the name and location of your high school?
2. When did you graduate from high school?
3. What is the name and location of the college where you completed your undergraduate degree?
4. When did you enter college for your undergraduate degree?
5. Was it within six months of your high school graduation?
6. What was your major?
7. Did you know what you wanted to study when you entered college?
8. When did you graduate with your undergraduate degree?
9. Were you a full-time student while you were completing your undergraduate degree?
10. Did you complete your undergraduate degree within 4.5 years or less?
11. Did you participate in a university sponsored study abroad program? If yes, how many credits did you earn?
12. During the course of your degree completion did you take any courses for credit during summer session or winter intersession?
13. Did you withdraw from any courses?
14. Did you repeat any courses?
15. Did you fail any courses?
16. Did you receive an incomplete grade at any time?
17. Are you the first in your immediate family to attend college?
Part 2 - Open Ended Questions

1. High School Early College Credit and College Preparation Questions

   B. Did you participate in AP, Dual Enrollment, IB or any other early college credit program? If so, which ones?

   B. If yes, how many college credits did you earn while still in high school?

   C. If you earned credits, how many, if any, counted towards your degree?

   D. Did you participate in a college preparation program?

2. Influences in High School on College / College Completion Questions

   A. Tell me about your thoughts on college completion while you were in high school.

   B. Describe the ways people in your life at that time such as parents or high school friends, discussed college with you.

   E. Describe the ways school officials in your life at that time such as teachers, guidance counselors, or coaches discussed college completion with you.

   D. What type of student did you consider yourself to be academically during high school—below average, average, honors, above honors?

3. Self-Determination & Personal Influences on College Completion while in College Questions

   A. What were your thoughts on college completion once you entered college?

   B. Did you participate in an “introduction to college course” during your first year of college? If so, how did the course impact your efforts to complete college?

   I. If you worked while in college, what impact, if any, did working have on you finishing college in four years?

   J. Describe the ways people in your life at that time such as parents or college friends, impacted your college completion.

   K. Tell me about any family obligations or commitments you had upon entering college or during the course of your college completion.
L. Tell me about any social organizations you participated in during college and describe your role as a member of the organization and the hours per week your participation required.

M. Tell me about any athletic teams you participated in during college and describe your role as a member of the organization and the hours per week your participation required.

4. Institutional influences on College Completion while in College Questions

A. Tell me about any external influences such as financial aid or scholarships that you believe impacted your college completion timeframe.

B. How did your experiences with academic advising influence the length of time it took to finish college?

C. How did your experiences with registration influence the length of time it took to finish college?

F. In what ways if any did college officials such as professors, program coordinators, program directors, research assistants impact the length of time it took to finish college?

G. How did you ensure that you had all the credits you needed to stay on track to graduate on time during the course of your college career?

5. What do you consider to be the most important factor in why you were able to complete college in four years and why?
Appendix D - Participant Consent Form

RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: Finishing on-time: A qualitative examination of contributors to time undergraduate degree completion.

VCU IRB NO.: HM14250
This consent form may contain words that you do not understand. Please ask the researcher to explain any words that you do not clearly understand. You may take home an unsigned copy of this consent form to think about or discuss with family or friends before making your decision.

PURPOSE OF THE STUDY
This study seeks to determine the most significant contributors to timely undergraduate degree completion.

You are being asked to participate in this study because you completed or are about to complete your undergraduate degree within 4.5 years after entering college within six months of your high school graduation.

DESCRIPTION OF THE STUDY AND YOUR INVOLVEMENT
If you decide to be in this research study, you will be asked to sign this consent form after you have had all your questions answered and understand what will be required of you.

In this study you will be asked to attend an in-person interview which will last approximately 45 to 60 minutes. A short follow-up email or phone call may follow your interview for clarification interview responses. While the interview will be recorded for accuracy your name will not be recorded. During the interview you will be asked questions such as:

a) Did you participate in the AP, Dual Enrollment, or any other early college credit program?
b) Did anyone discuss college completion with you while you were in high school?
c) In what ways if any did college officials such as professors, program coordinators, program directors, research assistants impact the length of time it took to finish college?

You will also be asked to provide access to a copy of your official transcript at no cost to you.

RISKS AND DISCOMFORTS
Sometimes talking about these subjects causes people to become upset. Several questions will ask about things your experiences in high school and college that may have been unpleasant. You do not have to talk about any subjects you do not want to talk about, and you may discontinue your participation at any time.
BENEFITS TO YOU AND OTHERS
You may not get any direct benefit from this study, but, the information we learn from people in this study may help other students to finish on-time and may help colleges develop timely completion support programs for students.

COSTS
There are no costs for participating in this study other than the time you will spend in the interview.

PAYMENT FOR PARTICIPATION
You will receive a $10.00 gift card to a local eatery at the end of your interview session

CONFIDENTIALITY
Potentially identifiable information about you will consist of interview notes and recordings, and data abstracted from your academic transcript. Data is being collected only for research purposes. Your interview data will be identified by a pseudonym. Once the recording of your interview has been transcribed and the transcription has been verified as accurate, the audio recording will be erased. All identifying information on your academic transcript will be redacted. All personal identifying information will be kept in password protected files and these files will be deleted three months after the study is completed. Your redacted academic transcripts will be kept in a locked file cabinet for one year after the study ends and will be destroyed at that time. The transcriptions of your interview will be kept indefinitely. Access to all identifying data will be limited to the researcher. A data and safety monitoring plan is established.

The findings from this study may be presented at meetings or published in papers, but your name will not ever be used in these presentations or papers.

VOLUNTARY PARTICIPATION AND WITHDRAWAL
You do not have to participate in this study. If you choose to participate, you may stop at any time without any penalty. You may also choose not to answer particular questions that are asked in the study.

Your participation in this study may be stopped at any time by the researcher. The reasons might include:
- the researcher thinks it necessary for your health or safety;
- you have not followed study instructions;
- administrative reasons require your withdrawal.

QUESTIONS
In the future, you may have questions about your participation in this study. If you have any questions, complaints, or concerns about the research, contact:

Dr. William Bosher, Wilder School of Government, 804-677-3290, wcbosher@vcu.edu

If you have any questions about your rights as a participant in this study, you may contact:

Office for Research
Virginia Commonwealth University
800 East Leigh Street, Suite 113
P.O. Box 980568
Richmond, VA 23298
Telephone: 804-827-2157
You may also contact this number for general questions, concerns or complaints about the research. Please call this number if you cannot reach the research team or wish to talk to someone else. Additional information about participation in research studies can be found at http://www.research.vcu.edu/irb/volunteers.htm.

**CONSENT**

I have been given the chance to read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My signature says that I am willing to participate in this study. I received a copy of the consent form prior to my scheduled interview.

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Signature of Person Conducting Informed Consent
Discussion / Witness

Principal Investigator Signature

Date
## Appendix E - Open Coding and Axial Coding Tables

### Table 1 - Open Coding Table

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Appendix G - Participant Course Load & GPA

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Note: Alanis Tomlinson completed her first semester at University of North Carolina. She received 9 transfer credits for her course work.
### Appendix H - Participant Major & College Entrance/Exit

Table 5 – Participant Major & College Entrance/Exit

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### Appendix I – Findings: Contributors to On-time Completion

Table 6 – Findings: Contributors to On-time Completion

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<td>Participating in a rigorous academic curriculum in high school</td>
</tr>
<tr>
<td>Having limited funds available to pay for college</td>
</tr>
<tr>
<td><strong>In-college</strong></td>
</tr>
<tr>
<td>Maintaining a minimum course load of 30 credits per academic year</td>
</tr>
<tr>
<td>Using summer sessions to make up course withdrawals and/failures</td>
</tr>
<tr>
<td>Identifying course requirements and developing a plan for completion during freshman year</td>
</tr>
<tr>
<td>Engagement in campus life as it relates to persistence</td>
</tr>
</tbody>
</table>