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Course selection theory and college transition seminars: an adaptation of college choice models to explain first-year students' course enrollment behavior

Curt Gerard Graff
University of Iowa

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COURSE SELECTION THEORY AND COLLEGE TRANSITION SEMINARS:
AN ADAPTATION OF COLLEGE CHOICE MODELS TO EXPLAIN
FIRST-YEAR STUDENTS' COURSE ENROLLMENT BEHAVIOR

by

Curt Gerard Graff

An Abstract

Of a thesis submitted in partial fulfillment of the
requirements for the Doctor of Philosophy degree in
Educational Policy and Leadership Studies (Higher Education)
in the Graduate College of
The University of Iowa

July 2011

Thesis Supervisor: Professor Michael B. Paulsen

ABSTRACT

This dissertation examines the course-enrollment behavior of first-year students at a public Midwestern university. Using the student choice construct, modern college choice theory, and the constructs of habitus, human capital, financial capital, social capital, cultural capital, along with background variables such as gender and locus of control, a course selection theory is proposed to explain students' voluntarily enrollment in a seminar designed to assist with the academic and social transitions to college. The literature review shows numerous studies have been done examining the impacts these courses may have on first-year students' academic performance, retention, and graduation rates. In many of these studies, however, subsets of students were targeted for enrollment and participation in the seminars was not voluntary. In others, students self-select into the first-year transition seminars, raising questions about whether or not their subsequent success is attributable to their participation in these courses. Prior to this study, few, if any, studies have examined enrollment in these first-year seminars as the dependent variable and attempted to explain how various factors impact whether or not students voluntarily choose to enroll.

This quantitative research looked at 7,561 first-year students enrolling in 2006-2007 and 2007-2008 and, using logistic regression, attempted to explain whether or not students chose to enroll in a transition seminar. Data was gathered from institutional offices (Admissions, Registrar, and Student Financial Aid) and through an Entering Student Survey completed by 99% of each entering cohort. Of the 52 independent variables included in the model, 17 were significant in one or more steps (or blocks) of the model.

This study found that students more advantaged in their individual or family college-going resources (e.g., higher ACT-Composite scores or a higher self-evaluation of their ability to appreciate fine arts, music, and literature) are less likely to enroll in the college transition seminar than students that could be described as more disadvantaged in terms of their college-going resources (i.e., an external locus of control, receiving a Pell Grant, and less access to various forms of capital). There is also evidence that students with past experiences where they may have learned the value of community or teamwork through in- and out-of-class experiences may see the first-year transition seminar as a way to begin creating these same types of connections or communities on the college campus. The dissertation concludes with a consideration of implications for future research, theory development, and institutional policy and practice.

Abstract Approved: _____
Thesis Supervisor

Title and Department

Date

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CERTIFICATE OF APPROVAL

PH. D. THESIS

This is to certify that the Ph. D. thesis of

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CHAPTER I

INTRODUCTION

Retention continues to be near the forefront of the issues facing higher education in the United States. Over the past quarter century, issues resulting from student retention and attrition have affected almost every aspect of higher education from enrollment management to housing to student services and curriculum. Colleges and universities have the goal of enabling matriculated students to persist to degree completion. The amount of resources invested in recruiting students, whether totaled collectively over the entire annual admissions' cycle from first contact to enrollment or individually for each recruited student, leads colleges and universities to seek a sufficient return on their investment. In order for the institution to realize this return, however, students must return to campus in subsequent years, persist, and graduate. Students who leave before attaining their degrees – whether by transferring, stopping out, dropping out, or dismissal – signify the loss of thousands of dollars of tuition, fees, and future alumni donations.

The financial impact of poor retention has become increasingly complex. As public funding continues to decrease, colleges and universities have been forced to become more self-reliant in securing internal sources of funding (i.e., tuition and fees) and external sources of funding (i.e., fundraising or moving toward privatization). These patterns have the potential to intensify as more and more state legislatures, seeking increased accountability in public higher education, consider tying future funding to retention and graduation rates (*Completion-based funding*, 2009; *The Illinois public agenda*, 2010). In private higher education where institutions are more highly tuition dependent, decreased enrollments from poor retention can become very problematic.

Along with reductions in internal and external funding, schools financial situations may become worse if prospective students develop negative views of an institution's commitment to student success and retention from, for example, the *US News and World Report's* use of retention and graduation rates in their rankings (Adelman, 1999; Barefoot, 2004; DeBerard, Spielmans, & Julka, 2004; Earl, 1988; Hebel, 2006; Johnson, 2000; Levitz, Noel, & Richter, 1999; Lipsky & Ender, 1990; Ness, Rhodes, & Rhodes, 1989; Schnell & Doetkott, 2003; *Shifting ground*, 2004; Swails, 2004). Pascarella's (1986) prediction that retention could become the measuring stick to assess and evaluate an institution's commitment to students may be coming true.

Statement of the Problem

It is not possible to retain every student who enrolls in any given college or university. Worse, it is not always possible to predict which students will need additional interventions to decrease attrition. There will always be students who choose to leave for personal, family, or financial reasons that will not reflect the quality of the institution-student match or the level of satisfaction between the student and the school. It is the students who leave for other reasons, however, and particularly those students who do not return for their second year, that cause colleges and universities the greatest concern. Data from 2010 shows national first-to-second year retention rates to average between 55.7% (public) to 58.6% (private) for two-year colleges and 67.6% (public) to 68.7% (private) for four-year colleges and universities (*National collegiate retention*, 2010). These figures are similar to those found by Choy (2002), Engle, Reilly, and Levine (2004), Sanford (1962), Summerskill (1962), Tinto (1993), and Vecellio (2001).

A common theme emerging from the literature regarding retention over the past

three decades is the necessity for new students to adjust academically and socially to the college or university they select. Poor academic performance by first-year students can lead to voluntary or involuntary decisions to leave, but only 15-25% of student attrition rates are the result of first term or first year grades (Tinto, 1993). The demographics of first-year college students changed in the 1970s and 1980s as increasing numbers of first-generation students, students from traditionally underrepresented groups, students from lower socioeconomic classes, female students, older students, and students with lower levels of academic preparedness began participating in higher education (Boudreau & Kromrey, 1994; Gordon & Grites, 1984; McConnell, 2000; Pascarella & Terenzini, 2005; Ryan & Glenn, 2004; Schnell & Doetkott, 2003). Whether or not you can predict the academic success of these first-year students from pre-enrollment variables has been studied extensively. The dependent variable most often examined is first semester grade point average and independent variables are either cognitive, noncognitive, or a combination. Cognitive variables include standardized test scores, high school grade point average, and high school class rank (Camara & Echternacht, 2000; Di Stefano, Pieper, Bell, & Phadke, 2005; Hood, 1992; Moore, 2004; Pfeifer & Sedlacek, 1971; Snyder, Hackett, Stewart, & Smith, 2003). Examples of noncognitive variables studied include race, gender, socioeconomic status, first-generation student status, and how well students transition to campus life (Aiken, 1964; DeBerard et al., 2004; Hahs-Vaughn, 2004; Hood, 1992; Ishitani, 2003; Jones, 2000; Livengood, 1992; McCarron & Inkelas, 2006; Nelson & Nelson, 2003; Pascarella, Edison, Hagedorn, Nora, & Terenzini, 1996; Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pfeifer & Sedlacek, 1971; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996; Ting, 1997).

Because the attrition rate for college students is highest between the first and second year of college, the issue of first-to-second year retention has also been studied extensively. Over the past two decades, colleges and universities have increased their efforts to curb student attrition by offering interventions to first-year students developed to assist them with their adjustment to college and the campus environment. The majority of these studies focusing on intervention programs have examined the effects of orientation programs or transition seminars designed to assist first-year students with their academic and social transitions to college. Many of these studies deal with program design and analysis of the effects of such intervention programs on participant outcomes, particularly when the intervention is targeted for at-risk students (i.e., students with low levels of academic preparedness, socioeconomic status, or first-generation student status). The dependent variable that is commonly studied is persistence. Common independent variables included in these retention studies are participation in first-year transition courses or seminars, standardized test scores, and first enrollment grade point averages of participants compared to nonparticipants (Barefoot, 2004; Bolender, 1994; Boudreau & Kromrey, 1994; Davis, 1992; Engle et al., 2004; Fidler, 1991; Lipsky & Ender, 1990; Muraskin, 1998; *National collegiate retention*, 2010; Ryan & Glenn, 2004; Schnell, & Doetkott, 2003; Sidle & McReynolds, 1999; Wilkie & Kuckuck, 1989; Williford, Chapman, & Kahrig, 2001).

Purpose and Significance of the Study

The research focus of the majority of the studies related to first-year students' success revolves around predicting their success from precollege characteristics such as standardized test scores or high school grade point averages. Often, these studies include

a specific cohort of students (e.g., by gender, race, or students considered at-risk) and findings may not be applicable to undergraduate students as a whole. In studies exploring the effects of first-year student interventions, the focus tends to be on comparing grade point averages and retention rates of participants versus nonparticipants. These studies are, in some ways, continuations of first-year student success studies in that the authors often employ the same precollege predictor variables and student cohorts when they identify their samples (Barefoot, 2004; Bolender, 1994; Coleman & Freedman, 1996; Fidler, 1991; Jones, 2000; Lipsky & Ender, 1990; Lohfink & Paulsen, 2005; Muraskin, 1998; Murtaugh, Burns, & Schuster, 1999; Pfeifer & Sedlacek, 1971; Snyder et al., 2003; Ting, 1997; Williford et al., 2001).

An important deficiency in the literature is that participation in a first-year transition experience has only been conceptualized and specified as an independent variable in the measure of first-year student retention or success. There exist very few, if any, studies where participation in a first-year transition course or seminar is the dependent variable and the focus of the study is on identifying and estimating the effects of the independent variables that may explain voluntary participation. The ability of faculty, administrators, and staff to understand who may voluntarily choose to enroll in a first-year transition course or seminar takes on added significance in light of the research demonstrating that all first-year students, regardless of their admissions profile, can benefit from participating in the course (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001).

Another deficiency in the studies of the success of first-year interventions has been the underutilization of noncognitive variables as determinants of how first-year

students may regard, and thus choose to enroll, in these interventions. Past researchers have typically studied the impacts of cognitive variables such as high school grade point average and ACT-Composite test scores and noncognitive variables such as socioeconomic and first-generation student status when predicting the level of success for first-year students (Aiken, 1964; Camara & Echternacht, 2000; DeBerard et al., 2004; Di Stefano et al., 2005; Hahs-Vaughn, 2004; Hood, 1992; Ishitani, 2003; Livengood, 1992; Lohfink & Paulsen, 2005; McCarron & Inkelas, 2006; Nelson & Nelson, 2003; Pascarella et al., 1996; Pascarella et al., 2004; Pfeifer & Sedlacek, 1971; Snyder et al., 2003; Terenzini et al., 1996).

Researchers have examined the effects that noncognitive variables such as cultural capital and habitus can have on the first semester grade point averages and persistence rates of first-year students (Collier & Morgan, 2008; Dumais, 2002; Lohfink & Paulsen, 2005; Pascarella et al., 2004; Perna & Titus, 2005; Walpole, 2003).

Researchers have not, however, studied how factors such as habitus or various forms of capital, individually and with traditional cognitive and noncognitive predictor variables, affect first-year students' decisions to participate in a college transition course. It is possible that a variety of precollege factors impact whether or not first-year students recognize the value of participating, or even feel it is necessary to participate, in a transition program or seminar. This literature gap tells us that we are not sufficiently informed regarding what variables play a role in students' voluntary choices to participate in first-year interventions.

To understand how and why students decide whether or not to enroll in a college transition course and why they make this decision, it is important to examine the student

choice construct and models involving college choice decisions. The student choice construct theory involves students making choices in sequential and situated contexts. Choices are influenced by individual and family backgrounds and environmental variables. One outcome of using the student choice construct is the understanding that policy effects should be studied across these diverse contexts. The student choice construct allows researchers to study diverse college students on their own terms and include their own unique circumstances and experiences. With this theoretical framework, researchers can emphasize the important role played by social and cultural experiences, how they impact the choice of whether or not and where to go to college, and, important to this study, whether or not to enroll in a specific course (Horvat, 2001; McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2006; Perna & Titus, 2005; Salisbury, Umbach, Paulsen, & Pascarella, 2009; Salisbury, Paulsen, & Pascarella, 2010; St. John, Asker, & Hu, 2001).

The earliest, or traditional, models of college choice were developed using human capital theory and status-attainment theory. Human capital, or economic theory, involves students using a cost-benefit analysis to determine the value and benefits of both going or not going to college and selecting the institution to attend. Status-attainment theories sought to determine how individuals attain and pass on occupational status or prestige. These theories attempted to explain educational and occupational choices through the interactions of factors such as academic aptitude, academic performance, parent's socioeconomic status (i.e., parent's level of education and income), influence of significant others (i.e., parents, teachers, and peers), and the level of educational aspirations (Alwin & Otto, 1977; Becker, 1962; Boyle, 1966; Hossler, Braxton, &

Coopersmith, 1989; Hossler, Schmit, & Vesper, 1999; Inoue, 1999; Paulsen, 1990, 2001; Paulsen & Toutkoushian, 2006, 2008; Radner & Miller, 1970; Schultz, 1982; Sewell, Haller, & Portes, 1969; Sewell & Shah, 1968; Young & Reyes, 1987).

The traditional models of college choice were developed by studying white males in the 1960s and, over time, higher education researchers began to realize their inadequacies (Inoue, 1999; Sewell et al., 1969; Tierney & Auerbach, 2005; Tierney & Colyar, 2005; Young & Reyes, 1987). The college students of the twenty-first century are increasingly diverse in terms of race, ethnicity, gender, ability, and socioeconomic status and the models used to determine how these students choose whether or not to go to college and where to go to college needed to include and reflect this diversity. To this end, modern college choice theories and research has begun using social-cultural variables such as habitus (i.e., an internalized set of values, beliefs, attitudes, and perceptions of one's place in the world and resulting available options), social capital, and cultural capital into their models along with traditional cognitive (e.g., standardized test scores or high school achievement) and noncognitive (e.g., race, gender, or socioeconomic status) measures (Perna, 2006; Perna & Titus, 2005; Salisbury et al., 2009; Salisbury et al., 2010).

The purpose of this study was to examine the effects of cognitive and noncognitive variables on whether or not first-year students voluntarily chose to enroll in a first-year transition seminar designed to assist them with the academic and social adjustments to college. Examples of cognitive variables included measures of precollege academic preparedness (e.g., standardized test scores, high school grade point averages) and commitment to attend college and earn a degree (e.g., responses to survey questions,

the number of high school mathematics courses taken). Examples of noncognitive variables included student background characteristics (e.g., gender, locus of control) and indicators of human, financial, social, and cultural capital (e.g., high school curriculum followed, financial and social determinants in college choice, amount of participation in and type of extracurricular activities in high school).

This study adapted a combination of the student choice construct and the traditional and modern college choice models previously described to a course selection model for examining the decision-making process of registering for a first-year transition course or seminar. Although this study followed a design similar to Salisbury et al.'s (2009) and Salisbury et al.'s (2010) studies of the decision-making process involved in choosing to study abroad, the research design was not derived from this work. Salisbury and colleagues extended the student choice construct from research focused on enrollment and persistence and integrated it with college choice theory in their study of students' intentions to engage in educationally meaningful activities during college. While intent to study abroad was the specific focus of their study, these authors hypothesized that an integrated model of student choice could be used to examine participation in a wide variety of college experiences, including first year transition courses. The dependent variable of this study, whether or not students voluntarily choose to enroll in a first-year transition seminar, was conceptualized through an application of modern college choice theory and the student choice construct to a model for course selection. The independent variables were also derived from traditional and modern college choice theories and research.

Research Questions

- What is the effect of human capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of financial capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of social capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of cultural capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of individual background characteristics on the decision to voluntarily enroll in a college transition course or seminar?

Overview of Methodology

This study was a quantitative analysis using logistic regression to estimate the effects of the independent variables that significantly explain the course enrollment behaviors of first-year students. This study examined the course selection choices of first-year students at a large, public, Research I university in the Midwest in an attempt to determine what pre-enrollment characteristics may explain why they choose to voluntarily enroll in a first-year seminar to assist them with the academic and social transitions to college. Pre-enrollment characteristics fell under the rubrics of human capital measures of academic achievement and preparedness, financial capital measures of parent's income and levels of education, and variables such as the amount of parent's encouragement and students' levels of involvement in extracurricular activities as indicators of the more abstract constructs of social capital and cultural capital,

respectively. Background variables assessed included gender and students' locus of control.

The population is undergraduate students at this university and the sample was domestic first-year students enrolling in 2006-2007 and 2007-2008 who completed an institutional Entering Student Survey. Data was collected from the following institutional offices: Evaluation and Examination Service, Office of Admissions, Office of the Registrar, and the Office of Student Financial Aid.

Definition of Terms

College Choice Theory

A theoretical framework that includes sociological, economic, and cultural theories enabling researchers to begin emphasizing the important role played by habitus, a social class based phenomenon, and the ways the various forms of capital (i.e., human, financial, social, and cultural) may exist and be acquired in the process of choosing whether or not and where to go to college. Modern college choice models incorporate social-cultural theories and have been developed along the three related but distinct phases of predisposition, search, and choice. Modern college choice models are considered combined models because they incorporate the traditional college choice models that were rooted in human capital, or economic, theory and the status-attainment models derived from sociological theories with other social-cultural constructs such as habitus and the various forms of capital (McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2006; Perna & Titus, 2005; St. John et al., 2001).

Course Selection Theory

A proposed adaptation of modern college choice models that can be used to

explain how college students determine which courses to select.

Student Choice Construct

An empirically tested construct or theorization that students make sequences of choices in situated contexts and these choices are influenced by diverse backgrounds, family backgrounds, and environmental variables and that policy effects should be studied across these diverse contexts. The advantage of using the student choice construct is it allows for the study of diverse college students on their own terms while incorporating the students' own unique circumstances and experiences. The creation of this theoretical framework that includes sociological and cultural theories allows researchers to emphasize the important role played by social and cultural variables and how they influence students' choices (Horvat, 2001; McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2006; Perna & Titus, 2005; Salisbury et al., 2009; Salisbury et al., 2010; St. John et al., 2001).

First-Year Transition Program or Seminar

An extended orientation program or course offered during an academic term designed to assist students with the academic and social transitions to college. Typical topics include study skills, time management, test taking strategies, motivation or goal setting, health related topics (alcohol, tobacco, stress, test anxiety, relaxation), use of campus resources including the library, learning assistance centers and campus technology, career counseling or assistance with selecting a major, critical thinking, student life, sexuality and relationship issues, financial management, higher education and institution-specific history, values, and culture, and the overall social integration into the larger campus community (Barefoot, 2004; Bolender, 1994; Coleman & Freedman,

1996; Engle et al., 2004; Gordon & Grites, 1984; Lipsky & Ender, 1990; Myers, 2003; Ness et al., 1989; Ryan & Glenn, 2004; Upcraft, Gardner, & Barefoot, 2005; Wilkie & Kuckuck, 1989).

First-Generation Students

Students from families where neither parent has had any postsecondary experience (McConnell, 2000; Nunez & Cuccaro-Alamin, 1998).

Socioeconomic Status

The students', or their families', relative economic and social ranking. Socioeconomic status is a combination of father's education level, mother's education level, father's occupation, mother's occupation, and family income (*National Center for Education Statistics, 2007*).

Habitus

This variable is a permanent, deep, and internalized system drawn from the student's immediate environment that affects social world interpretations, outlooks, and experiences. Students from different socioeconomic classes examine those around them to determine what is considered good or appropriate choices concerning aspirations and mobility. Habitus leads to an individual student's belief that they are entitled to an identifiable form of college education based on their family's habitus or class standing. Habitus enables or constrains students to utilize the class-based points of view, opinions, beliefs, and values of their family and peers when making college-related decisions (Horvat, 2001; McDonough, 1997).

Human Capital

Human capital is most often thought of as the combination of knowledge, skills,

abilities, attitudes, and talents each individual has that they may use to enhance their potential to be productive. An investment in higher education, or the active addition to one's human capital, is often considered extremely important in today's society. Human capital is often measured by assessing academic achievement or preparation through standardized tests or high school grade point average (DesJardins & Bell, 2006; Paulsen & Toutkoushian, 2008; Perna & Titus, 2005).

Financial Capital

Financial capital is determined by family income or wealth. The more a family earns or is worth the more financial capital they have (Perna & Titus, 2005).

Social Capital

Social capital is the inclusion or membership in social groups that allows for passing along the norms, social controls, and trust and authority issues that must be understood to optimize success as well as provide access to imitational resources and support. While social capital can be developed among students and their peers, it is most often passed on through families and primarily determined by parental involvement with their children and with the parents of their children's friends (Coleman, 1988; Perna & Titus, 2005).

Cultural Capital

Cultural capital is developed in an individual family through the actions of the family and is most often defined as the representations of symbolic wealth that define and are passed on in upper- and middle-class families to enable each succeeding generation to define and sustain their class status (Perna & Titus, 2005). Examples of cultural capital include being familiar with and having access to the educational credentials, linguistic

structures, school-related information, and social networks of the dominant, or upper- and middle-, classes who possess the most valued forms of cultural capital (Bourdieu, 1977; Dumais, 2002; Horvat, 2001; Lamont & Lareau, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003). From a research perspective, cultural capital has been operationalized with a variety of indicators ranging from educational expectations and experiences to knowledge of classical music and participation in the fine arts (DiMaggio, 1982). More recently, McDonough (1997) has asserted levels of cultural capital may be inferred from the type of high school attended.

Limitations and Delimitations

This study had several limitations and delimitations. It was conducted at a large, public, Research I university in the Midwest, making it difficult to generalize the findings to other institutions and students. The institution is classified as moderately selective and the average ACT-Composite score and high school grade point average of the entering class has been 24.9 and 3.55, respectively, over the past ten years (2001-2002 to 2010-2011) (University of Iowa [Office of the Registrar], 2010).

It was necessary to use caution with the data from the institution's Entering Student Survey because this instrument requires students to self-report their responses. Individuals may be willing to increase self-reportings of desirable acts and decrease self-reportings of undesirable acts, which may affect or bias the findings (Gosling, John, Craik, & Robins, 1998; Sappington, Kinsey, & Munsayac, 2002). Related to the issues involving bias and self-reporting is bias and satisficing behavior, or behavior that results when the primary goal becomes finishing the survey quickly. When people satisfice, they make little effort to understand each answer completely and are satisfied with providing

what they feel is a satisfactory number of answers (Dillman, 2000; Groves et al., 2004).

Another way this study was delimited was by not including race, international students, or choice of major as independent variables. Race was excluded because this institution has consistently been 90% white over the past ten years (Office of the Registrar, 2010). Many of the independent variables in this study were based on American culture and education; examples include questions related to social or cultural capital on the Entering Student Survey and what subjects are commonly taught in American high schools. As a result, international students were not included in the sample. Student's choice of academic major was also excluded. Over this same ten year period, more than 50% of the first-year students have been classified as open majors, pre-professional majors (e.g., pre-medicine or pre-law) or with an interest area such as elementary education (Office of the Registrar, 2010). Because of this, first-year students will most likely be taking general education curriculum or prerequisite courses their first semester rather than courses specific to any particular major.

Organization of the Dissertation

The rest of this dissertation will be arranged over four chapters. Chapter II provides a review of the conceptual framework around which this study is organized and the literature related to first-year intervention programs, habitus, human capital, financial capital, social capital, cultural capital, and the traditional cognitive, noncognitive, and background variables typically used by researchers in higher education that were used in this study. In Chapter III, an overview of the methods will be presented with a focus on the sample used, data collection, and analytical techniques. Chapter IV will discuss results. The dissertation will conclude with Chapter V and a discussion of the results and

their implications for theory development, institutional policy and practice, and future research.

CHAPTER II

LITERATURE REVIEW

This chapter reviews literature related to college students' retention and success, their decision-making processes, and their choices. It begins with a review of the student choice construct and college choice theory followed by an adaptation of these constructs that leads to the formation of a model theorizing the course selection process of first-year students. Specifically, the research questions being asked focus on the variables that influence students' choices regarding their voluntary enrollment in a first-year transition course or seminar.

First-year seminars have been found to be beneficial to all students who participate regardless of their academic or demographic backgrounds (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001). These benefits have often been defined by persistence to the second semester or second year of college, by evaluating first semester or first year academic performance, or by looking at graduation rates. Although many of these seminars or programs are targeted at specific cohorts of students (e.g., first-generation students, students from traditionally underrepresented groups, students from lower socioeconomic classes, and students with lower levels of academic preparedness), enrolling in them is often recommended rather than required.

This literature review begins by describing the student choice construct, traditional and modern college choice theories, the adaptation of these constructs into a course selection theory, a review of college transition courses or seminars, and how the constructs of habitus and capital (human, financial, social, and cultural) influence how

first-year students select which courses they will take during their first semester in college.

Theoretical Framework

The entire process of participating in higher education revolves around students making choices: Should I go to college? Should I enroll in a four-year or two-year school? Should I attend a public or private college? Do I want to go to a secular or religious institution? What should I major in? How will I pay for college? What classes should I take when I get there? Should I return for my second and subsequent years? Students must ask and answer many, if not all, of these questions before and after enrolling in the college of their choice (St. John et al., 2001).

Before beginning to explore the independent variables that impact a student's decision in response to one of these questions – What classes should I take when I get there? – it is important to first develop a theoretical framework to guide the understanding of student choice. The theoretical framework that guides this research and literature review includes the student choice construct and college choice theory. This literature review first examines the student choice construct and how it effects college choice decisions. Once this theoretical framework has been established, the literature reviewing the independent variables of habitus, each form of capital, and student background characteristics (e.g., gender, locus of control, and academic-related skills) will be presented and incorporated, by way of the student choice construct, into the college choice model and a model for course selection.

The study and process of college choice theory, or how students make the choices of if, when, how, and where to attend college began to be studied in response to the

shrinking pool of traditional high school aged prospective students in the 1970s. Colleges and universities began to worry about their fiscal and academic interests in the face of potential enrollment declines. The first studies of college choice were market driven. Colleges' interest was primarily tied to finding out how prospective students viewed their institution and what did or did not separate their college from the competition. Armed with the knowledge of institutional strengths, weaknesses, and niches together with knowledge of the sequence and stages of the college choice process, admissions offices sought to increase or stabilize enrollments. Studies of college choice in this period often utilized either the economic model of human capital theory or the sociological model of status-attainment theory (Hossler et al., 1989; Paulsen, 1990; Paulsen & St. John, 2002; Paulsen & Toutkoushian, 2008).

Because of the demographic shift in first-year college students over the past thirty years, the decreased enrollments in higher education were not realized as expected. The decades of the 1970s and the 1980s witnessed tremendous growth in the numbers of first-generation students, students from traditionally underrepresented groups, students from lower socioeconomic classes, continued increases in female students, older students, and students with lower levels of academic preparedness (Boudreau & Kromrey, 1994; Gordon & Grites, 1984; Pascarella & Terenzini, 2005; Ryan & Glenn, 2004; Schnell & Doetkott, 2003; Vecellio, 2001). Enrollment levels were safe, but in the 1990s colleges and universities grew increasingly aware that another issue could have equally disastrous effects on their institutions: poor retention. Student attrition began to signify the loss of thousands of dollars in tuition and fees. Compounding these losses are decreases in public funding, particularly if state legislatures tie funding levels with graduation and retention

rates. College and universities, especially private institutions, have been forced to rely more on tuition and fees (i.e., internal sources of revenue) and fundraising or increased privatization (i.e., external sources of funding) (Adelman, 1999; Barefoot, 2004; *Completion-based funding*, 2009; DeBerard et al., 2004; Earl, 1988; Hebel, 2006; *The Illinois public agenda*, 2010; Johnson, 2000; Levitz et al., 1999; Ness et al., 1989; Schnell & Doetkott, 2003; *Shifting ground*, 2004; Swails, 2004).

Early work on college choice theories, similar to many theories used to study college students in the 1960s and 1970s (e.g., student development theories), have been found to be inadequate and insufficient for the study of the diverse students that participate in higher education today. These theories were developed while studying the traditional college student of the day: white, upper- to middle-class, and male. In the 1980s through today, as the gender, class, and racial demographics of first-year students began to change, theoretical frameworks began changing with them (Evans, 1996; Paulsen & St. John, 1997, 2002; Perna, 2006; Salisbury et al., 2010). In the 1990s, theories governing college choice research underwent a revolution and began incorporating social class as a catalyst for research on college students and added the student choice construct to traditional models of human capital or status attainment theory.

The premise of the student choice construct theorizes that students make sequences of choices in situated contexts and these choices are influenced by diverse backgrounds (e.g., gender or ethnicity), family backgrounds (e.g., parent's socioeconomic status or level of education and income), and environmental variables (e.g., urban versus suburban neighborhoods or public versus private schools) and that policy effects should

be studied across these diverse contexts. The advantage the student choice construct provides, particularly when connected with an increasingly more heterogeneous first-year student population, is that the research is done on the college students' terms and within the scope of individual circumstances and experiences. The student choice construct includes sociological and cultural theories and allows researchers to emphasize the important role played by habitus, a social class based phenomenon, and the ways the various forms of capital may exist and be acquired in the process of choosing whether or not and where to go to college (Horvat, 2001; McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2006; Perna & Titus, 2005; Salisbury et al., 2009; Salisbury et al., 2010; St. John et al., 2001).

To consider the evolving theoretical framework of college choice theory in another way, it has moved from an egocentric idea dictated by individual colleges and universities to a more altruistic concept focused on students. Throughout the 1970s and 1980s, colleges and universities were interested in how and why students selected which school to attend because they wanted to maintain or increase their market share. Getting students and their tuition dollars to campus was the goal. In the 1990s, higher education realized the concerns of annually decreasing enrollments were not going to be realized because of the increases in the college-going pool that resulted from more heterogeneous first-year student cohorts (Boudreau & Kromrey, 1994; Gordon & Grites, 1984; Pascarella & Terenzini, 2005; Ryan & Glenn, 2004; Schnell & Doetkott, 2003; Vecellio, 2001). Market share concerns were replaced with retention based concerns but the underlying cause for concern was still financial: attrition means fewer students paying tuition and it costs more to recruit new students than to retain existing ones (Scalise,

Besterfield-Sacre, Shuman, & Wolfe, 2000).

As the twentieth century ended and the twenty-first century began, researchers began to recognize the value of studying the college choice process from the students' perspective instead of the institutions'. An understanding that students were more constrained related to financial means, mobility, and choice began to develop. What forms of print media and literature were most effective in recruiting students became less important than from whom junior high and high school students received support for developing college-going aspirations. The influence of standardized test scores and high school grade point averages and class ranks began to be viewed as no more important as the influence of peer groups and school counselors, especially when the affluence of the high school attended was included. It is for precisely these reasons, along with the far-reaching individual and social benefits of higher education, that the incorporation of social and cultural variables became increasingly important in the study of college choice and why both traditional and modern college choice variables were included in this study (Corwin, Colyar, & Tierney, 2005; Hearn & Holdsworth, 2005; Hossler et al., 1989; Leslie & Brinkman, 1993; McDonough, 1997, 2005; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Paulsen & Toutkoushian, 2008; Perna, 2006; Perna & Titus, 2005; Salisbury et al., 2009; Salisbury et al., 2010; St. John et al., 2001; Tierney & Auerbach, 2005; Tierney & Colyar, 2005; Villalpando & Solorzano, 2005).

The overarching theoretical framework of this study was grounded in the student choice construct, traditional human capital or status-attainment theories of college choice, and modern or combined (i.e., including forms of capital bound together by habitus) college choice theory (Hossler et al., 1989; Paulsen, 1990; Paulsen & St. John, 1997,

2002; Paulsen & Toutkoushian, 2008; Perna, 2006; Salisbury et al., 2009; Salisbury et al., 2010). The dependent variable of this study, whether or not students voluntarily choose to enroll in a first-year transition course or seminar, was conceptualized through an extension of modern college choice theory to a model for course selection. The independent variables were also derived from traditional and modern college choice theories and include: (a) human capital, (b) financial capital, (c) social capital, (d) cultural capital, and (e) background variables such as gender and measures of locus of control.

The Student Choice Construct and College Choice Models

To more fully understand the student choice construct, it is first necessary to understand the basic assumptions that are the foundation for the model. First, students make sequential education choices (e.g., developing postsecondary aspirations and choosing a college) that are influenced by family background characteristics (e.g., parent's level of education, socioeconomic status), educational and environmental experiences (e.g., academic achievement, quality of schools, college-going aspirations of peers), and policy-related variables (e.g., student financial aid and tuition costs) associated with higher education.

Second, although the choices students make may be as diverse as the students themselves, the choices are made in situated contexts specific to each individual student. Past theories involving student outcomes have typically assumed students had a substantial degree of economic, social, and geographic mobility; these are assumptions that are no longer realistic or reasonable with today's college students. If students' educational choices may be limited or constrained by their academic, financial, social, or cultural backgrounds, their experiences, and their circumstances, then they may also be

enabled by changes in institutional, governmental, and other policies and practices. The result of this latter point is the importance of paying more attention to public policy changes that may impact each individual student's situated context and the diverse impacts that individual and family cultures, values, and habits can have on student choice (Cabrera, Burkum, & La Nasa, 2003; Horvat, 2001; Hossler et al., 1989; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2006; Salisbury et al., 2009; Salisbury et al., 2010; St. John et al., 2001; Villalpando & Solorzano, 2005).

The earliest application of the student choice construct has been with the nexus involving college choice and persistence in studies that have examined the effects of financial factors on initial college enrollment decisions (i.e., college choice) as well as on subsequent re-enrollment decisions (i.e., persistence decisions). Salisbury et al. (2009) and Salisbury et al. (2010) have recently incorporated the student choice construct in their research on the decision-making process involved in determining whether or not to study abroad. Student choice has moved to the forefront in higher education decisions because these choices are voluntary in nature; the period of compulsory education has been successfully completed if postsecondary education is being considered (Hossler et al., 1999; St. John, Paulsen, & Starkey, 1996).

Before reviewing modern college choice theory and the course selection model on which this study was based, the traditional college choice theories revolving around economic models and status-attainment models will be reviewed.

Traditional College Choice Models

Economic Models

Human capital theory, from an economic model's perspective, relates college

choice with the utility, or cost-benefit, analysis of whether or not to invest in the acquisition of human capital in the form of higher education and, when appropriate, which college to attend. That is, students treat whether or not and where to go to college as an investment-making decision (Hossler et al, 1999; Paulsen, 1990; Schultz, 1982; Young & Reyes, 1987). First, students must decide if they will go to college (Radner & Miller, 1970). Inherent to this decision-making process is the determination of whether or not the student will be better off economically over their lifespan if they invest personal and family financial and time resources in their own human capital. Pursuing higher education involves the expenditure of both personal resources (e.g., savings, wages from summer or part-time jobs, gifts, and loans) and familial financial and time resources (Schultz, 1982). Students will decide to go to college when the utility, or value, of going is greater than the utility of getting a job, enlisting in the military, or another alternative (Bishop, 1975; Hossler et al., 1989; Paulsen, 1990; Radner & Miller, 1970).

In his study of human capital, Becker (1962) compared going to college to become better educated with taking a job that will initially require on-the-job training and a lower rate of pay. According to Becker, employees are willing to earn lower wages when they are first hired and undergoing training because they know that, at the conclusion of their training, they will have acquired a set of skills that will enable them to earn a higher wage in the future. As Baum, Ma, and Payea (2010) have demonstrated, the same can be said for individuals choosing to go to a two- or four-year college. Even though the students may experience decreased earnings while in school, they will have the potential to earn more over their lifetimes after earning a degree. Students entering the workforce immediately after graduating from high school will earn more annually

than their peers who enter college right after high school. Over time, however, and especially after graduation, the students going to college will earn more money and increase their annual earnings at a greater rate.

College investment decision-making is based on a comparison of the benefits and costs of attending a college or university versus the benefits and costs of not attending. Tuition, net tuition (i.e., tuition minus the subsidy value of institutional, state, and federal financial aid), other out-of-pocket expenses for fees, commuting, room and board, and indirect costs (i.e., wages not earned while in school) are the cost variables associated with going to college (Becker, 1962; Paulsen, 2001). The incremental future earnings are the primary private benefit associated with pursuing higher education. According to human capital theory, matriculation occurs when the perceived present value of the benefits of attending exceeds the perceived present value of the costs of attending (Paulsen, 2001). Students' assessments of the benefits and costs in these decisions are often mitigated by each student's perceptions of the compatibility of their own financial and academic resources and the cost and quality of the schools they are considering.

An additional influence in the decision of whether or not to go to college is the strength of the economy at any given time. In a recession, high school students may view higher education as having a lower opportunity cost when comparing unemployment rates or lost income (i.e., wages and benefits) to the expenses of tuition and fees. This is especially true if the jobs most often filled by high school graduates are now being filled by college graduates. When the recession ends and the opportunity cost of higher education begins to increase again (i.e., high school graduates can again earn higher wages in the workforce) this pattern will reverse itself (Paulsen, 1990).

Once students have decided to go to college and potential schools have been identified, students will begin this process all over again and conduct a cost-benefit analysis between schools to determine which will offer the best rate of return on their investment (Baum et al., 2010; Bishop, 1975; Hossler et al., 1989; Paulsen, 1990, 2001; Paulsen & Toutkoushian, 2008; Young & Reyes, 1987). Paulsen and Toutkoushian (2008) espouse that the level of utility associated with college attendance in general or attendance at a particular institution is unique to the idiosyncrasies of each individual student's preferences: two students will obtain different levels of satisfaction, or returns, on their investments in higher education compared to spending money on other goods and services.

Young and Reyes (1987) posit that it is the nonmonetary costs and risks of college attendance that take on the most significance. Monetary risks are associated with the costs of higher education compared to the delayed benefits from postponing entry into the workforce. Nonmonetary risks are categorized as social, psychological, physical, or functional and can fit into more than one category; for example, stopping out, dropping out, or being academically dismissed could be both a social and a psychological risk. Both monetary and nonmonetary risk factors may affect an individual student's utility analysis for attending college (Becker, 1962; Schultz, 1982; Young & Reyes, 1987).

Bishop (1975) proposed that when students begin searching for and comparing colleges, they will search for colleges they want to attend and they can afford to attend. According to Bishop, it is only necessary to find one college that meets both requirements. Costs, location, and selectivity are important factors, but they are only important as they relate to the student's "most attractive" (p. 4) college. The difficult part

in the cost-benefit analysis of individual colleges is determining which school most closely matches the student's "ideal college" (Paulsen, 1990, p. 66).

When students are differentiating between individual colleges, human capital theory assumes students will make rational choices and engage in "constrained optimization" or attempt to maximize their utility (Paulsen & Toutkoushian, 2006, 2008). Using their individual preferences to frame each analysis, students will engage in a cost-benefit analyses of enrolling in college compared to other goods they are interested in acquiring.

This idea of constrained optimization is related to Herbert Simon's concept of bounded rationality, or the theory that we make rational decisions that are often bounded by time, knowledge, or capacity. Simon argues that when we make decisions it is not possible to have complete knowledge of each alternative or consequence. We do not attempt to prepare an exhaustive list of choices and, if we did, it could not be exhaustive because we cannot know about each and every possible alternative. With these imposed boundaries on our rational decision-making, we choose to satisfice, or make decisions that will lead to satisfaction. In other words, we will select the first alternative that matches our needs and aspirations even though we are aware we have not explored all of our alternatives and the value of selecting one over another. Simon hypothesized we make these choices in what he calls "givens." Givens are beliefs that are acceptable to us as reasons for our choices and that guide our changes in behavior (Gigerenzer & Goldstein, 1996; McDonough, 1997; Perrow, 1986; Scott, 2003; Simon, 1956). Accordingly, high school students will not compare every college and university to one another. After they have selected the school that meets their "givens," they will stop

actively searching for the college or university to attend.

Status-Attainment Models

Status-attainment models were derived from the exploration of how American men attained social status or occupational prestige (Sewell, Haller, & Straus, 1957). These models describe a process of choosing educational and career options based on variables that will interact with each other throughout an individual's entire life. The most important variable for occupational attainment has been shown to be educational attainment (Inoue, 1999). Examples of other variables studied in status-attainment models are academic aptitude, academic performance, parent's socioeconomic status (i.e., parent's education and income), influence of significant others (i.e., parents, teachers, and peers), and the level of educational aspirations. Status-attainment models operate by exploring the interactions between these variables and how they help determine educational and career aspirations (Hossler et al., 1999; Inoue, 1999).

The earliest status attainment model was developed by Blau and Duncan in 1967. Their model was designed to look at how a father's socioeconomic status determined his son's future socioeconomic status and how much a son may be able to rise above his preset social position at birth. Blau and Duncan found that a father's occupational, or social, status affects his son's status but it does so primarily by an indirect effect on his son's educational attainment. The son's educational attainment will, in turn, impact his social status through his first and subsequent occupations. The occupational prestige the son has at any given time will result more from the status of his previous occupations than from his educational attainment. Overall, this model supported the hypothesis that the father's social status (i.e., level of income and education) exerted considerable

influence on the son's occupational attainment (Hossler et al., 1989; Inoue, 1999).

In 1969, Sewell et al. added social-psychological variables to Blau and Duncan's model and developed the SHP model, more commonly known as the Wisconsin model. Sewell et al. introduced the influence of significant others and academic performance as variables to go along with academic aptitude and parent's education and occupational attainment. Their hypothesis believed status attainment would be increased when individuals with greater academic aptitude have greater academic performance. This increased level of academic performance, when combined with family socioeconomic status, will lead to more encouragement from significant others (i.e., parents, teachers, and peers) and thus more motivation. They found that significant others' influence, particularly parent's influence, directly affected educational and occupational aspirations and educational attainment. The influence of significant others was directly affected by socioeconomic status and indirectly by academic aptitude through individual academic performance. The motivation and college-going aspirations of high school students can also be influenced by the socioeconomic status, ratio of male and female students, rigor of academic standards, and the range of academic abilities of their high school and the students who attend them (Alwin & Otto, 1977; Boyle, 1966; Inoue, 1999; Sewell et al., 1969; Sewell & Shah, 1968).

Modern College Choice Models

Over time, higher education researchers began to realize the inadequacy of the traditional models of college choice. In fact, Sewell et al. (1969) realized over forty years ago that their model had the deficiency of not being able to study status attainment across

cultures. Over twenty years ago, Young and Reyes (1987) explained that an economic cost-benefit approach to student's decisions to go to college does not explain the entire picture, particularly for underrepresented groups. Inoue's (1999) study was conducted primarily because the existing status attainment models had been built on studying white males in the 1960s. In their more contemporary work, Tierney and Auerbach (2005) echo the emphasis Sewell et al. (1969) placed on parental encouragement in the development of college-going aspirations but pointed out the differences in how parents of color or low socioeconomic status show their support and provide encouragement compared to white parents or parents with higher levels of socioeconomic status. With more economically and racially diverse high schools and corresponding peer groups comes the necessity to study how different peer groups impact college-going aspirations (Tierney & Colyar, 2005). The college students of the twenty-first century are incredibly diverse in terms of race, ethnicity, gender, ability, and socioeconomic status and the models used to determine how they choose whether or not to go to college and where to go to college need to include and reflect this diversity.

Unlike their traditional counterparts, modern college choice models seek an understanding of the process of college choice and not just an explanation of the decision-making process involved in the choice (Hossler et al., 1989). Modern college choice models are considered combined models because they incorporate the traditional human capital, or economic, theories and the status-attainment models derived from sociological theories.

The economic portion of modern college choice models supplies the assumptions of cost-benefit analysis and rational actions while the status-attainment contribution is in

the sociological measures of family conditions, socialization, and interactions with peers. An important distinction between the two classifications of models is that modern college choice models encourage policy research to identify economic or social forces impacting college-going decisions in order to promote change using interventions throughout all phases of the decision-making process (Cabrera & La Nasa, 2000; Hossler et al., 1989; Hossler et al., 1999; McDonough, 1997; Paulsen, 1990; Paulsen & Toutkoushian, 2008; Perna, 2006; Perna & Titus, 2005; St. John, 1994; St. John et al., 2001). Hossler et al. (1999) state that the economic portion of modern college choice models act to expand possibilities for students in the college choice process while, at the same time, the status-attainment variables act to narrow possibilities based on individual academic abilities and family socioeconomic status. The three distinct phases of modern college choice theory – predisposition, search, and choice – incorporate these social-cultural theories and interact and affect each other in subtle but complex ways.

Predisposition

The first stage of the college choice model finds students between eighth and tenth grade developing the aspirations to earn an associate or baccalaureate degree (Hossler et al., 1999). The economic theory contribution to this portion of the college choice model involves the cost-benefit analysis of whether or not to invest in the acquisition of human capital. When the decision to enroll in a college or university has been made, utility analysis decisions must be made regarding which school is the best choice or will offer the best rate of return on the investment (Bishop, 1975; Paulsen, 1990). Status-attainment theory variables that contribute to the predisposition stage include socioeconomic status, parent's encouragement and involvement with

postsecondary aspirations and plans, students' ability and high school achievement, and students' level of involvement in extracurricular activities. Literature on college choice has found parental encouragement and support (e.g., communicating the expectation of going to college, saving for college, visiting colleges together) to be the most important contributors to postsecondary aspirations. Following parental encouragement is the support students get from siblings, other family members, and peers (Hossler et al., 1989; Sewell et al., 1969; Sewell & Shah, 1968).

There exists an interesting reciprocal relationship between parental encouragement and high school academic achievement. As students' performance increases, so, too, does the encouragement they receive from significant others. The result of more encouragement from parents, teachers, and peers is the motivation to continue to do well; this leads to more encouragement and motivation and the cycle continues (Hossler et al., 1989; Sewell et al., 1969; Sewell & Shah, 1968). In 1999, Hossler et al. found some parents' aspirations declined over the course of their children's high school careers and that this statistically significant shift was most notable in homes with lower incomes, with parents with lower levels of education, and homes where the students had lower levels of academic achievement. The authors found that this change in parental expectations may precipitate a similar shift in their children's aspirations and lead students to decrease the number or type of colleges being considered or begin exploring what they now perceive to be more realistic educational or vocational plans. Students who find themselves in environments with little or no support or guidance are more likely to drop out or not pursue a college education (Cabrera & La Nasa, 2000; Corwin et al., 2005; DesJardins & Bell, 2006; Hossler et al., 1989; Long, 2004; Paulsen, 1990; Paulsen,

2001; Paulsen & St. John, 2002; St. John et al., 2001; St. John et al., 1996).

Search

During the search phase, students in grades ten and eleven begin actively seeking information about colleges and there is increased interaction between institutions and students. Postsecondary aspirations either remain stable or increase, particularly for sophomores who continue discussing their aspirations with their parents and have high grade point averages. Students develop lists, or what Hossler et al. (1999) call consideration sets, of possible institutions and their respective characteristics to begin the process of determining where they should apply. Cost and financial aid continue to be relatively obscure concepts for students, but parents are beginning to investigate and learn about both. It is possible for colleges to move in and out of the consideration set as financial aid increases, especially if it is in the form of scholarships. As juniors, aspirations continue to remain stable but students' consideration sets become dynamic and often increase in size. This is because students begin to learn and understand more about different types of colleges, what characteristics they want in a college, and what questions they need to ask in the search stage. The result is more colleges are considered.

The search process can be both inclusive (i.e., adding schools to be considered) and exclusive (i.e., removing schools from consideration) as students seek out campuses they feel will be the best fit academically, socially, and culturally. In other words, students will search for colleges with students like themselves. The search phase includes utility analysis when students attempt to assess institutional quality and programs compared to costs and location. Cost-benefit analysis becomes more important in the junior year as both students and parents begin educating themselves about cost and

financial aid (DesJardins & Bell, 2006; Horvat, 2001; Hossler et al., 1989; Paulsen, 1990; Paulsen & Toutkoushian, 2008; St. John et al., 1996).

Choice

The final stage of the college choice model occurs during the senior year of high school and consists of choosing a college and enrolling or making the decision to not go to college. Even though the final decision is made in this phase, in reality it is the conclusion of plans laid the first year of high school (or earlier) because college-going aspirations continue to remain stable. Peers, high school teachers, and school counselors have replaced parents and family members as primary sources of information. Parental encouragement and involvement, however, remains important. For those students electing to go to college, the schools in their final consideration set are typically more similar than dissimilar, making it more difficult to compare one college to another and choose a school. Because of this, college choice decisions are often made based on evaluating each school on the basis of net price or cost (i.e., tuition minus institutional, federal, or state financial aid). These decisions are often mitigated by each student's perceptions of the ability of their own financial and academic resources to match the cost and academic quality of the colleges or universities they are considering (Corwin et al., 2005; DesJardins & Bell, 2006; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Paulsen & St. John, 2002; Paulsen & Toutkoushian, 2008; St. John, 1994; St. John et al., 1996).

For a summary of the stages, factors, and outcomes of each stage of modern college choice theory, please see Table 1.

Table 1. College Choice Process: Stages, Factors, and Outcomes

Stages	Factors	Outcomes
Predisposition: Grades 7 – 9	Parental encouragement and support Parental saving for college Socioeconomic status Parental collegiate experience High school academic resources Student ability Information about college	Reading, writing, math, and critical thinking skills Career and occupational aspirations Educational aspirations Enrollment in college-bound curriculum
Search Grades 10 – 12	Parental encouragement and support Educational aspirations Occupational aspirations Socioeconomic status Saliency of potential institutions Student ability High school academic resources	Listing of tentative institutions Narrowing list of tentative institutions Securing information on institutions
Choice Grades 11 – 12	Educational aspirations Occupational aspirations Socioeconomic status Student ability Parental encouragement Perceived institutional attributes (quality, campus life, majors, availability, distance) Perceived ability to pay (perceived resources, perceived costs)	Awareness of college expenses and financial aid Awareness of institutional attributes and admission standards Attaining scholastic aptitudes and attitudes Perceived support from family and friends Institutional commitment Submission of applications Attendance Application for financial aid

Source: Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college-choice process. *New Directions for Institutional Research*, 107, p. 6.

Student Choice Construct and Course Selection Theory

After arriving on campus, students continue to make choices: What should I major in? Should I change majors? Should I live on or off campus? What student organizations or social groups should I join? Should I work? What classes should I take? It is this last question – What classes should I take? – that is the focus of the rest of this literature review and study. Unless students are required to take one or more specific courses because of their major, status (i.e., they were recruited to the institution for a specific purpose), or to retain a scholarship, they may have a great deal of freedom and

flexibility regarding what courses they take and when they take them. This is especially true for elective courses. First-year students often have the option of enrolling in a first-year transition course or seminar. Research has been quite clear that all students, regardless of their academic or demographic backgrounds, who enroll in first-year-experience courses designed to aid in the academic and social transitions to college will benefit from the course (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001). A greater understanding of who and why students voluntarily enroll in these courses can assist administrators charged with improving or maintaining retention in determining (a) whether or not to require all first-year students to enroll in a course or seminar or (b) identifying students who are not as likely to voluntarily enroll and should be targeted for more proactive advising to encourage registering for a first-year course or seminar.

This research adapts a combination of the student choice construct and the traditional and modern college choice theories previously described to a model for examining the decision-making process of registering for a first-year transition course or seminar. Whether or not students voluntarily chose to enroll in a transition seminar was the dependent variable of this study and was conceptualized through an extension of modern college choice theory to a model for course selection. The primary independent variables incorporated in this study included measures of (a) human capital, (b) financial capital, (c) social capital, (d) cultural capital, and (e) background variables related to locus of control and academic-related skills and were derived from traditional and combined college choice theories and research.

Although there are similarities between this study and the study completed by

Salisbury et al. (2009) and Salisbury et al. (2010), there are also some important and notable differences. First, Salisbury and colleagues stated the decision to study abroad, similar to college choice, is spread over a period of months and years. The decision to enroll in a first-year transition course or seminar is typically made at orientation over a period of hours or days. Another important difference between the two studies is Salisbury and colleagues inclusion of the impact made by capital while enrolled in college, combined with precollege capital, in the decision to study abroad. The decision to participate in a course or seminar during the first semester on campus does not allow for the incorporation of capital generated after matriculation.

Dependent Variable

First-Year Transition Programs

Rationale and history

A common theme emerging from the literature regarding retention over the past three decades is the necessity for new students to adjust academically and socially to the college or university they choose to attend (Barefoot, 2004; Ryan & Glenn, 2004). This has become increasingly more important given the eclectic demographics of first-year students. The past three decades have witnessed tremendous growth in the number of students with one or more of the following characteristics: traditionally underrepresented on campus, first-generation, older, female, and lower levels of socioeconomic status and academic preparedness. With this shift from somewhat homogenous first-year classes to more complex and heterogeneous cohorts came more diverse reasons for choosing to go to college. The experience of the traditional liberal arts and sciences undergraduate education continued to flourish, but many of these newer students came with the desire to

use the baccalaureate degree as the means for elevation to the middle-class and beyond (Boudreau & Kromrey, 1994; Gordon & Grites, 1984; Pascarella & Terenzini, 2005; Ryan & Glenn, 2004; Schnell & Doetkott, 2003).

The 1970s and 1980s also witnessed increased efforts to retain students, especially those students now enrolling who in the past had been marginalized by higher education. Because the demographics of first-year students was changing and institutions were admitting more and more first-generation, underprepared, lower socioeconomic students, retaining the students that did enroll became a priority. Efforts were made to increase the retention rates between the first and second years of college when the highest levels of attrition occur (Boudreau & Kromrey, 1994; Muraskin, 1998; *National collegiate retention*, 2010; Ness et al., 1989; Ryan & Glenn, 2004; Schnell & Doetkott, 2003).

As more attention was paid to these students, it became evident that underprepared, lower socioeconomic status, first-generation, or nontraditional students were not only coming to campus with the common anxieties, dislocations, and difficulties of any first-year college student, but they were also experiencing culture shock because of the incongruence between family and college life or traditions. If they were first-generation students without the benefit of parents or siblings with college experience, they were more likely to come to college with lower self-assessments of their academic abilities and greater self-doubts about whether or not they were academically prepared for college-level coursework (Hans-Vaughn, 2004; Inman & Mayes, 1999; Lamont & Lareau, 1988; McCarron & Inkelas, 2006; McConnell, 2000; Pratt & Skaggs, 1989; Terenzini et al., 1996).

The steps implemented by colleges and universities to curb attrition and increase retention were not entirely new, but resulted from a renewed interest in first-year orientation programs or seminars (Barefoot, 2004; Bedford & Durkee, 1989; Gordon & Grites, 1984; Ryan & Glenn, 2004; Schnell & Doetkott, 2003). The earliest first year experience courses can be traced to the late nineteenth century at Lee College (Kentucky) in 1882, Boston University in 1888, and Iowa State University in 1900. At the urging of the Carnegie Foundation in 1911, college and universities increased their efforts to “do something to help freshman find themselves” (Schnell & Doetkott, 2003, p. 378). Gordon and Grites (1984) believe that each orientation or seminar should assist first-year students as they become involved in the developmental tasks of becoming independent, developing physical and intellectual competence, and developing interpersonal skills. Integrating these topics within a course or seminar leads first-year students to feel secure in their new environments.

Tinto's retention theory and the design of first-year transition programs

The retention theories developed by Vincent Tinto have been most often used to guide the development and design of first-year interventions that will lead to academic success and increased retention. Tinto focused on individual characteristics, such as students' goal and institutional commitments, which are formed prior to enrolling. Goal commitment is the desire to earn a degree and institutional commitment is why the particular college or university was chosen. Both can be altered by the level of academic integration and social integration and it is the interplay between goal and institutional commitments and academic and social integration that affects retention. Academic integration, or academic performance and intellectual development, is more closely tied

with goal commitment and higher levels of academic integration (e.g., higher grade point average) typically lead to higher levels of goal commitment. Likewise, social integration (i.e., involvement in campus activities or student life and developing relationships with peers, faculty, and staff) and institutional commitment are linked. Ironically, too much social interaction is harmful to retention if the social aspects of college life take on primary importance at the expense of academic integration (Tinto, 1975).

With a clearer understanding of the student development and persistence research on the importance of academic and social adjustment, more and more institutions have implemented first-year transition programs to assist students with academic and social integration and improve retention. This is especially true with the increasing public calls for accountability, decreasing public support, and more heterogeneous first-year classes; for example, first-generation students have been shown to have lower levels of both academic integration and social integration than their continuing generation peers (Barefoot, 2004; Johnson, 2000; Levitz et al., 1999; McConnell, 2000; Muraskin, 1998; Murtaugh et al., 1999; Nunez & Cuccaro-Alamin, 1998; Tinto, 1993).

Barefoot (2004) estimated over 90% of colleges and universities in the United States offer some form of first-year course or seminar. Upcraft et al. (2005) stated first-year seminars are offered by 80% of all four-year institutions and 62% of all two-year colleges. Typical topics in first-year orientation programs or seminars include study skills, time management, test taking strategies, motivation or goal setting, health related topics (alcohol, tobacco, stress, test anxiety, relaxation), use of campus resources including the library, learning assistance centers and campus technology, career counseling or assistance with selecting a major, critical thinking, student life, sexuality

and relationship issues, financial management, higher education and institution-specific history, values, and culture, and the overall social integration into the larger campus community (Barefoot, 2004; Bolender, 1994; Coleman & Freedman, 1996; Engle et al., 2004; Gordon & Grites, 1984; Lipsky & Ender, 1990; Myers, 2003; Ness et al., 1989; Ryan & Glenn, 2004; Upcraft et al., 2005; Wilkie & Kuckuck, 1989).

Impacts of first-year transition programs

First-year transition courses or seminars have been shown to positively impact the academic and social integration of first-year students as they adjust to campus life and, in turn, increase goal and institutional commitment. The interventions, particularly those that focus on campus resources and culture, assist first-year students as they attempt to become savvy in “the way things are done.” Processes such as changing registrations, calculating grade point averages, and incorporating the use of course repeat policies aid students in successfully navigating through institutional policies and regulations.

Participants who become aware of campus resources (e.g., computer facilities, writing centers, tutoring, etc.) take advantage of these resources more often than students who do not participate in first-year intervention programs. Participation in first-year seminars has also been found to increase first-year students’ perceptions of their spirituality, moral and social values, and multicultural understanding (Engle et al., 2004; Pascarella & Terenzini, 2005; Upcraft et al., 2005; Wilkie & Kuckuck, 1989).

Improved academic performance over students’ first term or year is a second positive outcome of participation in first-year experiences. Although the findings have not always been statistically significant, participation in a first-year course has been consistently linked with higher grade point averages; this is true even in studies

controlling for differences in prior academic performance or aptitude (Engle et al., 2004; Upcraft et al., 2005). Wilkie and Kuckuck (1989) found participation in a first-year seminar to have a positive impact on the grade point averages of participants each of their first three years. Sidle and McReynolds (1999) noted students who completed a first-year seminar or course were less likely to be placed on academic probation and face an academic dismissal after their first year than their nonparticipating peers.

Most importantly, the combinations of the improvements in first-year academic performance and social adjustment have led to increases in performance, retention rates, and graduation rates. Williford et al. (2001) found the first-year retention rate for students participating in a first-year intervention program to be higher than nonparticipants' retention rates in seven of the ten years they studied. Fidler (1991) studied the retention effects of a first-year seminar over sixteen years and found higher retention rates for participants each year although his findings were significant in only eleven of the sixteen years examined. Studies that followed individual student cohorts over time observed decreasing retention rates each subsequent year, but retention rates for first-year seminar participants remained higher each year compared to nonparticipants. Even though the differences in retention rates for participants and nonparticipants were not statistically significant, they did become larger and approach significance over time (Schnell & Doetkott, 2003; Sidle & McReynolds, 1999; Wilkie & Kuckuck, 1989).

Students completing a first-year course or seminar also earn better grades and make better progress toward their degree. Williford et al. (2001) found higher graduation rates for program participants compared to nonparticipants in nine of the ten years they studied. Sidle and McReynolds (1999) discovered students who completed a first-year

seminar had a higher completion ratio of semester hours of credit earned compared to semester hours attempted. This resulted in students becoming less likely to have their financial aid reduced or eliminated and having to either stop out until they earned enough money to return or drop out entirely. This is especially true with the continued increases in low-income and more diverse first-year students nationwide and connects to the findings of Choy (2002) and Stampen and Cabrera (1988), both of whom have shown that financial need does not have to be a limiting factor for low-income students to enroll or persist in higher education.

The positive impacts of a first-year intervention can be far reaching and last beyond the first year, possibly even all of the way to graduation. As Tinto (1975) suggests, retention is not just an issue of academic performance or academic integration. Retention also involves social integration and, by extension, institutional commitment. All students, including students in the majority with above average high school grade point averages, class ranks, and standardized test scores can experience difficulties with adjustments to college life just as easily as students in underrepresented groups with average or below-average academic credentials (Barefoot, 2004).

There still exists, however, a belief that first-year interventions should be available only for students who fit into an at-risk category. Students considered at-risk do benefit from these programs (Boudreau & Kromrey, 1994), but research has shown that all first-year students can benefit from this type of seminar regardless of their admissions profile or demographic variables (Davis, 1992; Engle et al., 2004; Muraskin, 1998; Sidle & McReynolds, 1999; Williford, et al., 2001). The focus of these latter studies, unfortunately, has tended to be on comparing the grade point averages and retention rates

of program participants versus nonparticipants. In some respects, these studies could be considered follow-up studies to previous attempts at predicting first-year college success for high school seniors. Using similar precollege predictor variables and student cohorts, it is as if the researchers wanted to find out if the previous studies correctly predicted first-year college performance and retention.

An important deficiency in this research has been that participation by first-year students in a transition experience has only been an independent variable in the measure of their retention or success. Furthermore, first-year students often self-select or are required to participate in these experiences, therefore raising the possibility of self-selection bias in studies of the effects of interventions such as first-year seminars. No attempts have been made to understand if or why students will voluntarily choose to participate in the first-year course. There are few, if any, studies where participation in a first-year transition course is the dependent variable and the focus of the study is on the independent variables explaining voluntary participation in the seminar. This is particularly important because it may be that the determinants of whether or not students choose to participate can provide valuable insights into the correct interpretations of the effectiveness of first-year programs in previous research. This study addressed this critical gap in the literature. The ability of faculty, administrators, and staff to understand who may voluntarily choose to enroll in a first-year transition seminar takes on added significance in light of the research evidence that all first-year students – regardless of their admissions profile – can benefit from participating in a transition program (Davis, 1992; Engle et al., 2004; Muraskin, 1998; Sidle & McReynolds, 1999; Williford, et al., 2001).

Independent Variables

Habitus

Habitus is the catalyst that sets each factor involved in the predisposition, search, and choice stages of the college choice or course selection models in motion by providing the foundation and framework for each of the separate forms of capital to operate. It acts as a bridge allowing for the connection between social class and individual choice or action and provides the blueprint for maximizing and increasing existing social, cultural, human, and financial capital (Horvat, 2001).

Habitus is an internalized set of values, beliefs, attitudes, and perceptions of the structural boundaries and constraints that determine each person's place in the world and what options are available to them. Although each individual will view their world through the unique lens of their own habitus, there are a variety of social and cultural variables that influence the picture seen. The interactions between the social capital and cultural capital correlates of habitus are strong, but it is necessary to understand that habitus rises above its individual social and cultural components; in other words, the sum (habitus) is greater than the individual parts (social and cultural determinants). Dumais (2002) proposes that you cannot study the individual parts (e.g., social or cultural capital) without including habitus, or the guiding underlying class-based causes and structures influencing an individual's use of these resources (Dumais, 2002; Horvat, 2001; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2006; Perna & Titus, 2005; Walpole, 2003).

Habitus is grounded in social class and is developed subconsciously during childhood through observation of the immediate family and how members participate in

their social class, community, and school environments. It teaches us what responses and reactions are appropriate in any situation through an interpretation and understanding of our place within each group. Individual students observe their peers, both those within and outside their own socioeconomic class, and try to determine the appropriate or expected course of action they should follow after high school graduation. They will develop beliefs that certain options exist that are extensions of their family's class standing or habitus. Students with two professional parents, for example, may view going to college as an expectation rather than an option as well as having a sense of entitlement about what postsecondary options (e.g., elite or selective institutions) should be available to them. Likewise, a student from a working class background may see enrolling in a two-year college or vocational program or directly entering the workforce as the appropriate choice. A student whose family traditionally pursues a military career may perceive this as the approved or expected path to follow. Habitus makes possible the perpetuation of social classes and continued stratification of society by class. If you grow up a member of the working class, internalizing the beliefs, values, attitudes, and perceptions of the working class, there will be a tendency for you to believe you will remain a member of the working class (Dumais, 2002; Horvat, 2001; Lamont & Lareau, 1988; Paulsen & St. John, 2002; Perna, 2006; Perna & Titus, 2005; Walpole, 2003).

In higher education, habitus has most often been studied in relation to college choice. Students and their parents develop – through family, community, and school – perceptions that affect how hard they should study, whether or not to go to college, and how much individual time and financial resources should be invested. Family membership in the various social classes will impact the perceptions and expectations

developed for the value or returns (i.e., benefit-cost analysis or status attainment, or the variables in traditional models of college choice) to be derived from education. Students from lower socioeconomic families may draw from a habitus that, because they do not develop college-going cultural capital, leads them to believe they cannot be successful in college. They may develop lower aspirations and prematurely place themselves on a self-selected path of no college or expect two-year colleges or technical and trade schools to be their only possibilities. The result of these decisions may be the student, and later his or her family, remain in a lower socioeconomic bracket (Dumais, 2002; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2005; Walpole, 2003).

Because habitus does not have to be static it can also have the opposite effect. Habitus is a dynamic construct, especially when it includes interacting with people from different family backgrounds who possess different *habiti*. Schools provide exposure to students from the dominant cultures, allowing for the possibility of framing individual values and beliefs through a different lens or filter. Through interactions with peers from other socioeconomic classes, students can challenge their beliefs about appropriate choices related to academic and career aspirations and mobility. Students with minimal amounts of cultural capital may begin to view higher education as a way to accumulate capital and plan to earn a college degree as a means to provide for social and economic mobility. Habitus can generate the means through which we can earn and spend forms of capital (Dumais, 2002; Horvat, 2001; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2005; Walpole, 2003).

Similar to human capital theory, habitus is also related to the notion of bounded rationality in the decision-making process. To reiterate, Herbert Simon's concept of

bounded rationality can be compared to the concept of constrained optimization used in economics (Paulsen & Toutkoushian, 2006, 2008) as an explanation of how individuals undergo cost-benefit analysis in the face of constraints or boundaries on their knowledge of alternatives and consequences. After conducting the cost-benefit analyses, the available option chosen is the one that fits our individual preferences (i.e., Simon's "givens"). To put it another way, we will choose to satisfice, or make decisions that will lead to satisfaction, even though we know that not every alternative was considered (Gigerenzer & Goldstein, 1996; McDonough, 1997; Perrow, 1986; Scott, 2003; Simon, 1956).

Habitus plays a role in this process. The habitus we develop and internalize as we move through childhood leads us to identify choices that may be viewed as reasonable or sensible as young adults and it is here that the constructs of bounded rationality and habitus intersect. When people choose to satisfice, they may do so with the understanding that not every alternative was considered (i.e., bounded rationality). What they may not realize, however, is that even though they know that they have not considered every alternative, all of the alternatives that could be viewed as sensible choices are conditioned by their individual habitus. In other words, two individuals, each operating in a different level of habitus, may satisfice under two very different conditions of bounded rationality (Collet, 2009; Perna, 2000).

This decision-making process may carry over to orientation when first-year students determine their class schedules, especially if they feel that part or all of their registration is being prescribed. They may, for instance, be required to enroll in some combination of writing, speech, mathematics, or science classes. If this is the case, when

these students are able to select electives, they may select the first class that fits into their schedules without examining why they should register for one class over another. This course enrollment behavior will lead to a satisficing schedule, but not one that will enable them to more easily navigate through the academic and social adjustments to college or become prepared for the coursework that lies ahead.

Capital

In this portion of the literature review each of the four forms of capital, each set of independent variables, how they interact with the college choice and course selection models, and how they relate to the research questions will be discussed.

Human capital

Human capital is most often thought of as the combination of knowledge, skills, abilities, attitudes, and talents each individual has that they may use to enhance their potential to be productive. This productive capacity can be loaned out to an employer in exchange for salary and benefits. Individuals with higher levels of knowledge, ability, or talent may demand or expect greater compensation in exchange for their work. An investment in higher education, or the active addition to one's human capital, is often considered extremely important in today's society (DesJardins & Bell, 2006; Paulsen & Toutkoushian, 2008; Perna & Titus, 2005). Baum et al. (2010) have shown that earning a bachelor's degree will result in an approximate 66% increase in lifetime earnings over having only a high school diploma.

Human capital is often measured by assessing academic achievement or preparation. Academic achievement is measured through standardized tests or high school grade point average. Academic preparation is measured by whether or not a high

school student was enrolled in a college preparation curriculum or by examining the total amount of coursework completed in a certain area (e.g., mathematics or science) (Adelman, 1999; Perna & Titus, 2005). With the increased diversity of college attendees over the past thirty years (i.e., first-generation students, students from traditionally underrepresented groups or lower socioeconomic classes, and continued increases in female and older students) has come an increased diversity in the level of first-year student's academic preparedness (Boudreau & Kromrey, 1994; Gordon & Grites, 1984; Pascarella & Terenzini, 2005; Ryan & Glenn, 2004; Schnell & Doetkott, 2003; Vecellio, 2001).

Academic achievement

Most four-year colleges and universities use standardized test scores in their admissions decisions. Noble and Camara (2004) stated that in 1999 eighty-two percent of all four-year colleges and universities required an admissions test and more than 91% of non-open enrollment schools required one. These tests provide an objective and standardized assessment of high school students' achievement and overall academic skills. College admissions tests, like the American College Test (ACT) or the Scholastic Aptitude Test (SAT), provide a means of measuring beyond high school grade point average or high school class rank and allow comparison of students "who have attended different high schools, completed different courses, received different grades in courses taught by different teachers, and had access to different opportunities and experiences both in and out of school" (p. 283). The ACT is comprised of a series of achievement tests developed to assess critical reasoning and higher-order thinking skills related to English, mathematics, reading, and science. The premise is the ACT is measuring skills

and knowledge necessary for success in a student's first year of college that should be gained in a typical high school college preparatory curriculum. The SAT I was also designed to assess abilities essential for successful college-level academic work, focusing on verbal and mathematical abilities. The SAT II consists of subject area tests that are not associated with this study.

The developers of the ACT and the SAT have categorically stated that no single measure or instrument is able to capture each of the factors associated with academic success and colleges and universities should use multiple measures in determining the admissibility of applicants. For example, while aptitude is associated with potential for performance on a task or activity in the future, achievement is based on past accomplishments. Academic achievement is often measured by high school grade point average and high school class rank. The ACT and SAT will also include other personal characteristics such as effort, attendance, conformity, and motivation. In other words, the ability of standardized tests to predict future academic success comes from those skills and knowledge gained through previous learning experiences (Jacobs, 1991; Noble & Camara, 2004; Noble & Sawyer, 2002).

The predictive ability of college admission test scores related to academic success has been studied extensively. Results typically indicate pre-admission variables from the high school record (i.e., grade point average and class rank) are more accurate predictors of academic success than ACT or SAT scores (Micceri, 2001). These same studies also found that standardized test scores do add to the predictive ability of preadmission variables, especially when combined with information from the high school record, and may provide opportunities to more greatly differentiate individual applicants (Baron &

Norman, 1992; Beecher & Fischer, 1999; Camara & Echternacht, 2000; Mouw & Khanna, 1993; Noble & Sawyer, 2002). For higher achieving first-year college students, the ACT-Composite score does provide greater differentiation across levels of achievement than high school grade point averages (Noble & Sawyer, 2002).

Academic preparation

Like many things in higher education, the variables affecting academic preparation have been studied from the perspective of first-generation students, low socioeconomic students, or students from other at-risk designations. According to Corwin et al. (2005), access to a college preparatory curriculum is the most critical variable for enabling students to get into a college or university. Focusing only on characteristics of student background and ability, Paulsen (1990) found that students were more likely to attend college if they followed a college preparatory curriculum in high school.

Adelman's research (1999) showed high school curriculum to be the most important academic resource students bring with them to college and had a higher correlation than any other measure (e.g., standardized test scores, high school grade point average, or high school class rank) to earning a four-year degree. Perna's (2005) review showed consistency in higher rates of college-going in high school students who followed a college preparatory curriculum compared to a vocational curricular program.

In her 2005 study, Perna also concluded that family socioeconomic status affected the necessity of being academically prepared for college. If a family's socioeconomic status is low and not accompanied by a habitus that supports college-going aspirations, whether or not the student follows a college preparatory program may be a moot point. It is also possible for the socioeconomic status of the majority of students in the student

body to impact the chance of participating in a college preparatory curriculum. High schools with large numbers of higher socioeconomic status students will see more students following a college preparatory curriculum; the opposite will be true in schools where the majority of students are from lower socioeconomic status homes. Everson and Millsap (2004) discovered that schools and the differences between them do matter. The size of the school, the proportion of children in poverty, and the ethnic and racial composition of the high schools are all important and meaningful predictors of student achievement beyond the differences of individual students. Socioeconomic status or first-generation student status are not strong determinants of developing college aspirations in students enrolled in college preparatory curriculums. Students with higher socioeconomic status are, however, substantially more likely to go to college even when not enrolled in college preparatory curriculums (Choy, 2001; Perna, 2005).

Of all of the courses in a college preparatory curriculum, mathematics courses have the strongest influence on enrolling in a four-year college or university and earning a bachelor's degree. Completing a course more advanced than the second year of high school algebra can increase the odds by more than 200% that a student who goes to college will graduate. Students who complete an algebra course in the eighth grade create the opportunity to take advanced mathematics courses in high school. Taking advanced mathematics courses in high school is associated with greater probabilities of developing and acting on college-going aspirations. This is particularly true for first-generation students. Students whose parents were college graduates were more likely to receive parental encouragement to take algebra in eighth grade and were more than twice as likely to enroll in the course compared to their first-generation peers. For those first-

generation students who did take algebra in eighth grade, they enrolled in advanced mathematics courses at a rate much closer to their continuing generation peers and were more than twice as likely as their first-generation peers to enroll in a four-year college or university if they continued taking mathematics courses after completing algebra 2 (Adelman, 1999; Choy, 2001; Horn & Nunez, 2000).

Human capital's relationship to the college choice model and course selection model

Human capital, working with habitus and socioeconomic status, acts to separate future college students from nonattendees well before they reach the predisposition stage. Students are more likely to pursue higher education when academic aptitude and high school academic achievement (i.e., human capital) is higher (Corwin et al., 2005; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990). Beecher and Fischer (1999) and Perna and Titus (2005) have shown that high school curriculum does not have to limit postsecondary options. Everson and Millsap (2004) found that exposure to extracurricular activities and student achievement could, at least at the individual student level, moderate the relationship between socioeconomic status and SAT scores.

These authors findings, however, are fighting an uphill battle against student, family, and, to an extent, cultural capital and habitus. As an example, first-generation students have been shown to have lower measures than their continuing generation peers in comparisons of SAT test scores, high school grade point averages, and confidence in their ability to be academically successful in college (Hans-Vaughn, 2004; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Riehl, 1994). Human capital exerts a unique influence in the search stage because students most often prefer to not attend a college or university where the average student ability is considerably higher than their own

(Horvat, 2001; Hossler et al., 1989; Paulsen, 1990). In parallel fashion, students with ability levels above what they expect others in a first-year transition seminar to have may be less likely to consider enrolling.

Regarding course selection theory, human capital can affect the choice to enroll in a first-year transition seminar when students feel that their level of human capital (i.e., academic aptitude and achievement) does or does not require them to take the course. Those students who come to campus having already earned college credits may feel they do not need a course designed to teach them how to be academically successful in college. On the other hand, students with limited or no exposure to the academic rigor of college level coursework may feel this type of course is necessary. Students with higher levels of human capital may view a first-year seminar as an unnecessary or less challenging course option and choose to take what they feel is a required or more challenging course instead. Other students with more human capital may feel it is necessary to only take the minimum number of courses required to be a full-time student, particularly if they have already earned college credits through AP exams or dual enrollment options and can graduate in four years even if they enroll in fewer courses each term. If the first-year course is being marketed, or perceived as being marketed, to at-risk students, first-year students with more human capital may not feel the other students in the course will be like them and choose to not enroll.

High school achievement and academic aptitude have often been independent variables in research predicting first-year student success and retention (Camara & Echternacht, 2000; Di Stefano et al., 2005; Hood, 1992; Moore, 2004; Pfeifer & Sedlacek, 1971; Snyder et al., 2003). These variables have also been studied in relation to

the outcomes of participation in first-year transition programs (Barefoot, 2004; Bolender, 1994; Coleman & Freedman, 1996; Fidler, 1991; Lipsky & Ender, 1990; Muraskin, 1998; Murtaugh et al., 1999; Williford et al., 2001). Even though participation in these programs is often an important independent variable in these studies of student success and retention, measures of human capital have not yet been examined as independent variables in the study of voluntary enrollment in a college transition course or seminar. The impact human capital has on students' voluntary decisions to enroll in a first-year transition course or seminar is a focus of this study and is directly related to the following research question: *What is the effect of human capital on the decision to voluntarily enroll in a college transition course or seminar?*

Financial capital

Financial capital, at least for the purpose of this review, is a paradox. It is the easiest form of capital to explain but has the ability to impact the other forms of capital the most. Financial capital is determined by family income: the more a family earns or is worth, the more financial capital they have. The amount of financial capital and the range of an individual's or family's habitus go hand-in-hand. Habitus, or internalized values, perceptions, beliefs, and attitudes, allows us to understand the structural boundaries and constraints that determine our place in the world and what options are available to us. By observing those around us and how they participate in their social class, community, and school environments, we subconsciously develop habitus as we age (Dumais, 2002; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2006; Perna & Titus, 2005; Walpole, 2003).

How individuals or families interact and participate in their social class,

community, and school environments will largely be determined by their financial capital. It is the prevalence of financial capital that will help determine their social class, impact their community (i.e., where they can afford to live), and their school environment (i.e., the quality of the public schools where they can afford to live and whether or not private schools are affordable). Everson and Millsap (2004) found that the ratio of children in poverty, the racial and ethnic demographics, and the size of the high school are all important independent variables in the prediction of student achievement when the differences between students is held constant. Socioeconomic status, first-generation status, and the resources of the school a student attends can individually or collectively create roadblocks when it comes to learning about and completing college applications and financial aid forms, preparing for and taking standardized tests such as the ACT or SAT, or participating in pre-enrollment programs (Hans-Vaughn, 2004; Hossler et al., 1999; McConnell, 2000; McDonough, 1997, 2005; Pascarella et al., 2004; Terenzini et al., 1996; Tierney & Auerbach, 2005).

In higher education, financial capital has most often been studied from the perspective of low income or first-generation students. When combined, the coupling of first-generation status and low socioeconomic status can be detrimental to whether or not high school students choose, or even consider the possibility of, going to college. First-generation students are most likely to be older, female students from traditionally underrepresented racial or ethnic groups. They are often married, have more dependents, and are from lower socioeconomic status homes. To compensate for more limited financial resources, first-generation college students from lower income homes are more likely to continue living at home, not be actively involved in campus life, work close to

full-time (usually off-campus), and enroll only part-time (Choy, 2001; Lohfink & Paulsen, 2005; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Terenzini et al., 1996; York-Anderson & Bowman, 1991).

Some of these decisions may be driven by habitus: if attainment of a high school diploma is the only parental expectation (London, 1989, Walpole, 2003; York-Anderson & Bowman, 1991) and attending college is not seen as a necessity, the family message may be that you can enroll if you like but you are responsible for providing for the cost of your education. These decisions can have detrimental affects related to first-year academic success. First-generation students are more likely to receive financial aid than continuing generation students and this aid is more likely to be in the form of grants rather than loans. This is becoming an increasingly precarious position for first-generation students to be in with the consistent shift over the past two decades of federal student financial aid from grants to loans (Choy, 2001; Lohfink & Paulsen, 2005; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Terenzini et al., 1996; York-Anderson & Bowman, 1991).

Financial capital's relationship to the college choice model and course selection model

Students are more likely to enroll in a college or university when family income is higher. The level of financial capital an individual or family possesses will impact the cost-benefit analysis undertaken in the predisposition stage more than any of the other independent variables, particularly when examining the opportunity cost of attending college. For a student whose college aspirations are impacted by a habitus that does not

value postsecondary education, it may be hard to argue the value of foregoing entry into the workforce to go to college when the economy is doing well if the forgone earnings (i.e., opportunity cost) of attending college does not outweigh the perceived economic value of the college degree over the lifetime. In a recession, however, when the better paying jobs available to noncollege graduates are filled by college graduates, this opportunity cost will shrink. In this latter situation, students who may not have otherwise been predisposed to enroll in a college or university will be more likely to do so (Paulsen, 1990, 2001). Perna (2005) states that family socioeconomic status, or the combination of parent's financial and human capital, plays a role for high school students who are not enrolled in college preparation curriculums. For students not in college preparatory curriculums, those from families with higher socioeconomic status were substantially more likely to enroll in college compared to students with the lowest socioeconomic status.

In the search stage, students are assessing the quality and programs of different colleges and comparing their costs and locations. Students with less financial capital are more likely to continue living at home and work close to full-time at a location that is usually off-campus (Choy, 2001; Lohfink & Paulsen, 2005; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Terenzini et al., 1996; York-Anderson & Bowman, 1991). These students are more likely to be first-generation students and more likely to receive financial aid than continuing generation students or students from families with more financial capital (Nunez & Cuccaro-Alamin, 1998; Paulsen & St. John, 2002).

Financial capital impacts the choice phase when students make their final

decisions after comparing the benefits and the opportunity cost of going to college versus not going to college and assessing the cost, location, general reputation, and job placement rates of each college identified in the search phase. Students with limited financial capital rely more on the financial aid packages available at each institution in the college choice process than their peers with more financial capital, especially when the aid is composed of scholarships and grants (Paulsen, 1990, 2001; St. John et al., 2001). Choy (2002) and Stampen and Cabrera (1988) have shown that financial need does not have to be a limiting factor for low-income students to enroll or persist in higher education.

Regarding course selection theory, financial capital will affect the choice to enroll in a first-year transition course when students undertake the cost-benefit analysis of enrolling in this course over another class. The perceived value of this course may end up being secondary to the perceived opportunity cost of the course and this may be especially true for those students who have not been completely convinced a college education is worth the investment. Spending hard earned tuition dollars on a seminar that will not satisfy a graduation requirement may be a difficult choice to make when the opportunity cost is not taking a course required for their intended major or graduation.

The opposite may be true for students from families with higher levels of financial capital. These students may see the less academically rigorous seminar format as a way to round out a first semester schedule with a course that will earn credit toward graduation. In some instances, enrolling in this type of course could be “free.” For example, at the four-year, public, Research I university where this study took place students pay prorated tuition up to twelve semester hours, or the equivalent of full-time

student status. Once students reach twelve semester hours, they will only be charged more if the additional course they enroll in has an accompanying course fee (there does exist a different tuition rate for resident versus nonresident students). In other words, the student taking fifteen semester hours will pay the same tuition as the student taking twelve semester hours. First-year students enrolled in fourteen semester hours during their first-semester will pay tuition on only twelve semester hours; that is, they can enroll in the two semester college transition seminar at no additional cost except a minimal course fee.

How the course is marketed by the institution will also affect the choices made by students with different levels of financial capital. Is the course targeted to at-risk students or low-income students with a demonstrated or perceived lower level of academic preparedness? If so, students with limited financial capital may feel singled out and decide to not enroll because of a perceived (correct or incorrect) negative association with taking the course. Likewise, students from families with higher levels of financial capital may choose to not enroll for the same reasons. On the other hand, as previously discussed, if the seminar is marketed the same to all first-year students, students with more financial capital may choose to register for this course as an inexpensive and efficient way to earn elective credits toward graduation.

Financial capital has been used as an independent variable in research measuring first-year student success and retention and is often measured through family socioeconomic status, first-generation student status, or both. These latter variables have also been studied in relation to the outcomes of participation in first-year transition programs (Barefoot, 2004; Boudreau & Kromrey, 1994; Choy, 2002; Hans-Vaughn,

2004; Inman & Mayes, 1999; Ishitani, 2003; Lohfink & Paulsen, 2005; London, 1989; McCarron & Inkelas, 2006; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Terenzini et al., 1996; Walpole, 2003; York-Anderson & Bowman, 1991). Even though participation in these programs is often an important independent variable in these studies of student success and retention, financial capital has not been an independent variable in the study of voluntary enrollment in a college transition course or seminar. The impact financial capital has on students' voluntary decisions to enroll in a first-year transition course or seminar is a focus of this study and is directly related to the following research question: *What is the effect of financial capital on the decision to voluntarily enroll in a college transition course or seminar?*

Social capital

Similar to other forms of capital, social capital has often been studied in higher education by comparing the “haves” to the “have nots.” The most common measure of social capital in college choice models has been the level of parental involvement in choosing if, when, and where to go to college. Students who “have” social capital typically are continuing generation students from upper- and middle-class families, have higher degrees of academic aptitude and high school academic achievement, and have been more heavily involved in high school extracurricular or community activities. Conversely, students fitting into the “have not” category can be generalized as first-generation college students from families with lower socioeconomic status and high school academic achievement or measures of academic aptitude that put them in at-risk categories. Like other forms of capital, social capital is a resource that students may draw upon as needed to enhance productivity, facilitate upward mobility, and realize economic

returns. Social capital permits students to gain access to other forms of capital (e.g., human or cultural capital) in addition to institutional resources and support (Coleman, 1988; DiMaggio & Mohr, 1985; Lamont & Lareau, 1988; Perna & Titus, 2005). Higher education offers the opportunity to accumulate human capital and, in the process, acquire social, cultural, or financial capital that will enable individual students to be able to fully utilize the increased human capital that accompanies a college degree (Pascarella et al., 2004; Walpole, 2003).

Social capital can best be described as networking and is dependent upon contacts and membership in social groups and the interplay between the obligations owed to one another and the information that can be shared (Bergerson, 2007; Coleman, 1988; Perna & Titus, 2005; Portes, 1998; Walpole, 2003). Acting as the foundation in each instance is the trustworthiness of each party involved: an obligation that will not be repaid or information that is inaccurate is of little use to the person accumulating the credit or knowledge (Coleman, 1988).

Like the other forms of capital, social capital is passed along generationally. The social capital relevant to choosing whether or not to go to college manifests itself primarily through the level of parental involvement in the college choice process. High levels of parental involvement in the three stages of the college choice model are typically absent with first-generation college students because their parents did not attend college. This results in students becoming disadvantaged in the college decision process (Choy, 2001; Horn & Nunez, 2000; Hossler et al., 1999; McDonough, 1997; Pascarella et al., 2004).

When students develop aspirations of going to college, it may result in parental

resistance for low income students or students of color. The concept of going to college involves unfamiliar sacrifices, life choices, and opportunity costs for parents. First-generation students and their families do not have access to the same types of knowledge about the importance of a college degree, the differences between two- and four-year colleges, the admissions process, preparing for and taking college entrance examinations, scholarships or other financial aid options, or applying to more than one school to seek out the best financial aid package. It is often the case that these parents provide moral and emotional support and motivation while older siblings or other family members provide more direct information and guidance (Bergerson, 2007; Choy, 2001; Hossler et al., 1999; McDonough, 1997, 2005; Tierney & Auerbach, 2005).

Parental involvement is commonly described by measuring the amount of encouragement in each parent-child relationship. The role parental encouragement plays in choosing to go to college cannot be understated. Parental encouragement, particularly in the predisposition stage of the college choice model, has consistently been found to be the single most significant factor effecting college aspirations even when controlling for parent's levels of education or income. High school students who not only talk to their parents about going to college but continue these conversations as sophomores and beyond are more likely to matriculate. Examples of manifestations of social capital through parental involvement can be seen in early and frequent communication between parent and child about going to college, especially when the communication involves a parental expectation of enrolling. As an example, parents will ask "What do you think you would like to major in at college?" and not "Do you think you will want to go to college?" Parents become involved in high school curricular choices when they actively

encourage their son or daughter to take an advanced mathematics course. Saving for college, regardless of the amount the family can save, is another important way parents can communicate an expectation of going to college (Cabrera & La Nasa, 2000; Corwin et al., 2005; Horn & Nunez, 2000; Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005).

Whether or not parent's aspirations for their children include higher education can be affected by socioeconomic status and each child's academic achievement (Paulsen, 1990). There exists an interesting reciprocal relationship between parental encouragement and high school academic achievement. Hossler et al. (1989) found that as the level of parental encouragement increased, student achievement also increased. Meanwhile, Hossler et al. (1999) found some parents' aspirations declined over the course of their children's high school careers and that this statistically significant shift was most notable in homes with lower incomes, with parents with lower levels of education, and homes where the students had lower levels of academic achievement. The authors found that this change in parental expectations may precipitate a similar shift in their children's aspirations; the students may decrease the number or type of colleges being considered or begin exploring what they now perceive to be more realistic educational or vocational plans.

According to Bourdieu (1977), forms of capital are mechanisms for the dominant class to maintain its dominance. When social capital has been involved in research in higher education, however, it has typically utilized Coleman's (1988) interpretation. According to Coleman, social capital bears the responsibility of passing along the norms, social controls, and trust and authority issues that must be understood to optimize

success. Coleman conceptualized social capital as resulting from the influence of parental involvement in two separate relationships: the relationship individual students have with their parents and the relationship each individual student's parents has with other adults, particularly the parents of their children's peers at school.

The measure of parental involvement that can be taken from these relationships can best be understood through Coleman's (1988) study of communities and intergenerational closure. Coleman defined communities as either having or not having intergenerational closure, or, in other words, how do students' and their parents interact with their peers and their peers' parents. Intergenerational closure is necessary to allow for the passing along of appropriate social norms and, more importantly, to insure that a sufficient level of trust is present to promote the reproduction of obligations, expectations, and the forwarding of information.

The influence of intergenerational closure was most evident in Coleman's (1988) research on dropout rates between the sophomore and senior years at public (14.4%), private (11.9%), and Catholic (3.4%) high schools. Coleman hypothesized the reason for the low dropout rate in the Catholic high schools was the result of the adult religious community surrounding the schools providing an advantage in the creation of a community with intergenerational closure and a more promising environment for the development and proliferation of social capital. Further analysis of the private schools demonstrated that, when categorized as religious or nonreligious, the high schools that also had adult religious communities associated with them (as opposed to, for example, private boarding schools) had similar dropout rates (3.7%).

Perna and Titus (2005) studied parental involvement and racial or ethnic

differences in college enrollments and found results supporting Coleman's idea that parental involvement is a form of social capital and parents can transmit norms and values that promote college enrollment by interacting with their children, other children's parents, and the school. Coleman (1988) theorized it was not just parental presence in the family that leads to positive social capital, but the attention given to each child is also important. It is too easy, he argued, to focus on the breakdown of the nuclear family and single-parent families. Equally important is the strength of the parent-child relationship. Coleman believed a weak or nonexistent relationship resulted in little or no social capital passing from the parent to the child regardless of how much was present.

Tierney and Auerbach (2005) explored social capital in families of color with low socioeconomic status. They found that parents were less likely to actively participate in school related activities for reasons ranging from language and child care issues to deep-rooted discrimination and feelings of distrust. These parents encouraged and supported their children in ways nontraditional to Coleman's (1988) work. For example, they offered similar verbal encouragement but may have shown nonverbal or symbolic encouragement by working two jobs or making other financial sacrifices instead of creating a college savings account. Although this study will assess social capital with measures in line with Coleman's work, it is imperative that higher education researchers begin developing ways to measure and evaluate parental encouragement and involvement that is not dominant-culture specific.

As important as parental involvement is, in the choice stage of the college choice model students begin relying less on their parents and more on their peers, teachers, and school counselors. The amount and quality of the knowledge that can be gained from

these latter resources will be dictated by the type of high school attended. Writing about the role of school counselors in college preparation programs for underrepresented students, McDonough (2005) points out that, even though school counselors are the most logical choice in K-12 education to lead the programs, they are poorly trained and ill equipped to carry out the task in public high schools. The wide variation in guidance resources and activities among types of high schools reported in McDonough's (1997) research is directly tied to the socioeconomic status of the communities and neighborhoods where the schools are located (McDonough, 2005; Paulsen, 1990). Paulsen (1990) concluded that the socioeconomic status of a student's high school and neighborhood are directly related to forming college aspirations. The shared norms and goals of the neighborhood and school communities can have an important effect on developing college-going aspirations, even above those of family socioeconomic status and students' ability and achievement.

School counselors in more affluent high schools and neighborhoods spend more time working with students on college choice. In less affluent communities and schools this is not the case, particularly because the school counselors cannot outsource the psychological counseling responsibilities of their positions the same way school personnel can in private or college preparatory schools. The schools that are forced to deal with inadequate college counseling are those enrolling students of color. McDonough (2005) found that school counselors are significantly more likely to influence the college-going plans of African American and Latino students. It is these same students, however, who are most likely to have poorly trained or nonexistent school counselors. Underrepresented students are also less likely to rely on the school counselors

that are available, especially if they have a history – which may be either real or perceived – of not tracking students of color in college preparatory curriculums or of not encouraging their college-going aspirations.

Social capital's relationship to the college choice model and course selection model

Social capital has a pronounced impact on the predisposition stage. It is possible for high school students and their parents to differ in terms of postsecondary aspirations and these differences can be mediated by social class. Parents in lower socioeconomic status homes may send a message that aspiring for more than a high school diploma is unnecessary. Parental involvement and encouragement is the single most important factor related to the development of college-going aspirations regardless of parental education level or socioeconomic status. Parents develop these aspirations in junior high and high school students through the values and goals they communicate to the young people around them. As Coleman (1988) demonstrated, parent's expectations can influence their children's friends as easily as their own children. This communication can be verbal, explicit (e.g., "Where do you think you will go and what do you think you will major in?" versus "What do you think about going to college?"), directive (e.g., enrolling in advanced mathematics courses) and symbolic, such as starting a college savings account (Horn & Nunez, 2000; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990).

How social capital interacts with college aspirations is also impacted by the high school attended. McDonough (1997) compared the constant and consistent messages of going to college that students at a private college preparatory school received from everyone around them to the less consistent and lower aspiration messages from parents, friends' parents, peers, teachers, and school counselors received by students attending a

public high school with a much lower level of financial resources and academic reputation. Along with this are different social capital-generating opportunities between these two groups of students where they can learn more about two-year versus four-year schools, public versus private colleges, and applying to more than one college in an attempt to generate the best possible financial aid package.

Parental involvement is also influential in the search stage when students are collecting information about colleges and universities, assessing schools academic quality and programs, and comparing their costs and locations. Parents can accompany students on college visits, learn about financial aid and how to apply, assist in assessing the quality of various schools and departments, and continue to communicate their opinions and expectations. Parents tend to be more involved in setting the ranges of cost, geographic location, and quality limits within which their children need to conduct their college searches (Hossler et al., 1999; Paulsen, 1990). Interestingly, McDonough (1997) found a commonality in the distance from home, measured by travel time to different colleges and universities, that students were willing or able to consider regardless of their families socioeconomic status. There was, however, a distinct difference: students from higher socioeconomic status homes incorporated air travel in their measures of travel time while students in lower socioeconomic status homes used only times and distances that could be traveled by land. Lohfink and Paulsen's (2005) results supported McDonough's claims when they found continuing generation students were more likely to take a cosmopolitan approach to identifying and selecting colleges. Social capital will impact the choice phase when students interact with their parents, peers, and other members of their social group (e.g., their friends' parents, high school teachers, and

school counselors) when they make their college choice decision. As with the predisposition and search stages, the choice stage will also be impacted by socioeconomic status, academic achievement, and the high school attended (Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005).

Regarding course selection theory, social capital will work through parental involvement, relationships with peers and the parents of peers, and type of high school in the predisposition stage of deciding whether or not to enroll in a first-year transition seminar. How much students consider enrolling may be dictated by how much their parents encourage them to enroll. To consider this in a different way, how much and in what ways was the first-year experience marketed to parents? Parents who have attained one or more postsecondary degrees may feel that they can be the best source for feedback and solutions if their son or daughter experiences social or academic transition issues. The opposite could occur for first-generation students: their parents may actively encourage them to enroll in a first-year seminar to learn the “tricks of the trade” that they as parents are unable to teach. In both scenarios, parents have the ability to sway a student in the direction of enrolling or not enrolling in the course.

It is possible that an interesting relationship may exist between the influence of parents and peers in the search and choice portions of the course selection model. Students want to enroll where their peers will be like them and, during these stages in the college choice model, students will seek schools where they can fit in academically, socially, and culturally (Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005). By extension, in the course selection model students will want to enroll in courses where their peers will be like them.

Students who have parents with college degrees and who have been tracked into college preparatory curriculums may meet the conditions for nonparental encouragement to enroll in a first-year transition course. Students who are first-generation college students and may not have been tracked into college preparatory curriculums may receive parental encouragement to enroll. But what will happen when the peer influences of high school curriculum and extracurricular involvement collide? A student who is not tracked into a college preparatory curriculum but is involved in extracurricular activities will have the opportunity to develop more than one peer group. Because the extracurricular peer group is not based on academic ability alone, the participating students will have the opportunity to interact with students with varying degrees of habitus and each form of capital. Students – and their parents – will also have opportunities to engage each other at school or community events and potentially foster the intergenerational closure outlined earlier by Coleman (1988). This, in turn, could impact the choices made when selecting colleges and courses. High ability continuing generation students and low ability first-generation students could have reciprocal or antagonistic influences on each other when deciding whether or not to enroll in a first-year transition course: Do I take a class with my friend even if it means I am in a class where the other students are not like me?

The type of high school attended can also play a role in whether or not students decide to enroll in a college transition seminar. Students matriculating from well respected high schools with strong social capital networks may feel they are prepared for the challenges of college life while those students coming from less affluent high schools may more readily understand the value of participating in the seminar. This latter point is more likely to be true if these students are targeted as possible candidates for the course

based on their admissions profiles. The cost-benefit analysis of taking this type of course may also end up shaping the amount of parental encouragement to enroll. Parents with college degrees may see more value in taking a course that adds little, if any, to the tuition costs for the first semester and earns credit toward graduation with little chance of negatively affecting the grade point average. Parents who have not attended college may see only the value of paying for courses that will satisfy graduation requirements, particularly when the student is attending part-time and the cost of attending places an additional financial burden on low income individuals or families.

Parents will influence their children's enrollment plans and students will register for the first-year transition seminar provided they receive the necessary parental encouragement and believe the other students enrolled in the course will be like them socially, academically, and culturally. The institution's hope is that the students are selecting to voluntarily enroll in the course because they see the value in preparing for and learning how to handle the various academic and social transitions involved with going to college. The reality may be that enrollment decisions are driven, at least partially, by parental encouragement to take a less academically rigorous and expensive course to maximize credits earned toward graduation during the first semester.

Social capital has been an independent variable in research measuring high school student success and retention and the development of college-going aspirations. These constructs have been shown to have positive impacts on academic success in college as have studies researching first-year students participating in first-year transition programs (Bergerson, 2007; Cabrera & La Nasa, 2000; Choy, 2001; Coleman, 1988; Corwin et al., 2005; DiMaggio & Mohr, 1985; Horn & Nunez, 2000; Hossler et al., 1989; Hossler et al.,

1999; Inoue, 1999; Lamont & Lareau, 1988; McDonough, 1997, 2005; Pascarella et al., 2004; Paulsen, 1990; Perna & Titus, 2005; Portes, 1998; Sewell et al., 1969; Sewell & Shah, 1968; Tierney & Auerbach, 2005; Walpole, 2003). Social capital has not, however, been studied as an independent variable in the decision-making process of voluntary enrollment in a college transition course or seminar. The impact social capital has on students' voluntary decisions to enroll in a first-year transition course or seminar is a focus of this study and is directly related to the following research question: *What is the effect of social capital on the decision to voluntarily enroll in a college transition course or seminar?*

Cultural Capital

Cultural capital refers to the representations of symbolic wealth that define and are passed on in upper- and middle-class families to enable each succeeding generation to continue defining and sustaining their class status (Paulsen & St. John, 2002; Perna & Titus, 2005). In other words, cultural capital acts to legitimize power (Bergerson, 2007; Dumais, 2002). Examples of cultural capital include being familiar with and having access to the linguistic structures, cultural knowledge, school-related information, knowledge of the values of higher education, and educational credentials of the upper- and middle-, or dominant, classes who possess the most valued forms of cultural capital (Bourdieu, 1977; Dumais, 2002; Lamont & Lareau, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003).

Cultural capital is developed in individual families through their habitus and actions. Trips to the theatre, concerts, or museums, when deemed appropriate or important by one generation, take on the same importance and status by the next

generation. According to Bourdieu (1977), the possession of cultural goods as symbolic goods is possible, but only for those who can fully understand or appreciate them. To emphasize this, he points out that trips to museums are not limited by socioeconomic status the same way trips to the theatre are, yet museum attendance increases as education increases and “is almost exclusively to be found among the privileged classes” (p. 492). When this occurs between generations cultural capital is amplified, resulting in the differentiations between the social classes continuing to be reproduced and the dominant classes continuing to define “legitimate” culture, or that which is worthy of being sought and possessed.

Bourdieu’s (1977) ideas on cultural capital have guided how this construct has been used in higher education research. He theorized that cultural capital is used by the dominant classes to maintain their position in society by excluding people from employment, opportunities, or other resources. Bourdieu distinguished three different kinds of cultural capital. The first is objectified cultural capital, or objects requiring specific cultural abilities to appreciate (e.g., works of art or fine wine). The second is institutionalized cultural capital, which is comprised of academic credentials and the educational systems that supply them. The third form is embodied cultural capital, or the ability to value and identify with cultural goods. Researchers have most often used embodied cultural capital as a vehicle to measure cultural capital by measuring students’ interest in music or the arts (Dumais, 2002). In an effort to simplify how cultural capital is defined, Lamont and Lareau (1988) proposed cultural capital be viewed as “widely shared, high status cultural signals (attitudes, preferences, formal knowledge, behaviors, goods, and credentials) used for social and cultural exclusion” (p. 156).

In addition to families, schools reproduce and distribute cultural capital. Coleman's (1988) work with social capital includes students developing their own sense of closure with expectations and norms. Because the school environment is not socially neutral, these expectations tend to mimic those of the dominant classes. For example, every student attending a particular school in a particular town has a certain amount of cultural capital. The amount of cultural capital individual students possess will be decided by family socioeconomic status and actions – as Bourdieu (1977) pointed out, trips to museums are not constrained by family finances. Schools not only reward students who possess high levels of cultural capital but require students to have the ability to receive and internalize it.

Even though schools institutionalize cultural capital they do not provide or teach this construct to their students. Instead, students must acquire the cultural capital necessary to access academic credentials and educational rewards from their families (Bergerson, 2007; Collier & Morgan, 2008; Dumais, 2002; Horvat, 2001; Lamont & Lareau, 1988; Walpole, 2003). The educational system does provide a way to convert financial capital to cultural capital, but the extent to which this conversion can take place is predetermined by the amount of cultural capital each individual has to begin with (Bergerson, 2007). For students without the general knowledge of culture that is often learned in the homes of the upper- and middle-classes, the same educational system that rewards this knowledge penalizes students from lower socioeconomic classes that do not possess high levels of cultural capital (Lamont & Lareau, 1988).

Collier and Morgan (2008) studied Bourdieu's belief that the dominant culture is transmitted and rewarded through school systems. They hypothesized that to become a

successful college student you must be able to understand (a) how instructors evaluate student performance, (b) the assumptions or expectations instructors may make when doing the evaluations, and (c) the available resources students can use to recognize and respond to the explanations of their instructors. In a traditional view, students' academic ability determines how well they can master course material and how successful they will be when evaluated. This may be mediated, however, by how well each student is able to understand and adapt to the instructor's expectations. Ability may influence learning, but this is not enough to demonstrate learning has occurred. This is particularly true when the student is not aware of the instructor's expectations related to an examination, paper, or project (Collier & Morgan, 2008; Horvat, 2001).

Students from families with higher levels of cultural capital can more easily pick up the cues given by instructors concerning assignments and evaluations, feel more comfortable in the classroom, and find it easier to be academically successful. Students with lower levels of cultural capital, however, tend to spend less time interacting with their teachers (Nunez & Cuccaro-Alamin, 1998; Terenzini et al., 1996). Instructors pick up on which students more quickly and easily respond to their cues and may give them more attention, assistance, or believe these students to be more gifted or intelligent (Dumais, 2002; Lareau & Weininger, 2003). This may further impact students when school counselors and teachers collaborate on decisions about students' potential and ability. If students are tracked into and out of college preparatory curriculums, their peer groups – and any learning from peers that may occur – will be affected (Hearn & Holdsworth, 2005; Tierney & Colyar, 2005).

Students from working- and lower-class families may develop the social,

linguistic, and cultural competencies of the dominant classes, but they will not display their proficiency with the same ease as their upper- and middle-class peers who have been taught different language “codes” (Lamont & Lareau, 1988, p. 154) since childhood; this is particularly true when English is not the primary language spoken in the home (Lamont & Lareau, 1988; Perna & Titus, 2005). As Collier and Morgan (2008) explained, first-generation students lack the “pattern recognition” (p. 430) necessary to allow them to more easily identify and meet their instructor’s expectations. In the end, however, the impact these factors may have on the student’s evaluations or performance is attributed only to the student’s aptitude and ability, resulting in the further institutionalization of cultural capital in the school environment (Lamont & Lareau, 1988).

Another important way cultural capital can impact individual students is through their level of involvement in high school. Students with lower levels of cultural capital tend to spend less time socializing with peers (Nunez & Cuccaro-Alamin, 1998; Terenzini et al., 1996). These characteristics continue after matriculation and may be caused by some of the same factors that impact the accumulation of cultural capital, such as students from lower socioeconomic homes may need to hold jobs, possibly off-campus, while going to school.

It is important to understand the value that involvement can have on developing college-going aspirations (Hossler et al., 1999) and on academic success in college (Pascarella et al., 2004). Rice and Darke (2000) examined two types of scholarship students: those receiving merit scholarships based on academic achievement and aptitude and those receiving a scholarship based on demonstrated leadership ability in high school

and/or community extracurricular activities. Their hypothesis was that success, defined by retention and cumulative grade point average at the conclusion of the third year of college, would not differ significantly between these two groups of students. They further hypothesized that the combination of leadership and involvement for leadership scholarship winners would have a positive impact on retention and grade point average because the students receiving leadership scholarships were required to continue being actively involved in student activities or organizations in college. The authors found no significant differences between groups when compared by cumulative grade point averages after the third year, but a significant difference was found related to retention. Rice and Darke concluded that, while high school leadership may not be a direct predictor of college success, it may be an indirect predictor of college success through its measure of college involvement. They did, however, urge caution until their findings could be replicated because students receiving leadership scholarships were required to be actively involved in campus activities to retain their award. Ting, in a 1997 study of at-risk students and predictors of academic success, found the most effective noncognitive predictors for retention were successful leadership experiences and community service.

Regarding college preparation programs, Corwin et al. (2005) proposed that peer groups are helpful but not critical and extracurricular activities are irrelevant. Their conclusions are paradoxical in light of the literature reviewed in the same edition by Hearn and Holdsworth (2005). These authors found participation in cocurricular school based activities could lead to the following potential benefits: greater academic achievement and social skill development, higher levels of aspirations related to

education and careers, lower risks of dropping out of high school, and increased feelings of self-esteem and self-efficacy. Participating in extracurricular activities can increase human, social and cultural capital and this is especially true when students of color and urban youth participate in community based activities. Taken as a whole, Hearn and Holdsworth believe these outcomes can positively affect the decision to go to college. They do point out that various racial and ethnic groups will derive different benefits from activities that exist in different schools or communities. This also extends to groupings within the different activities; for example, participating in an individual sport can lead to different benefits from participation in a team sport.

Cultural capital's relationship to the college choice model and course selection theory

Cultural capital's effect on the predisposition stage is evident primarily through parent's level of education and encouragement and through participation in extracurricular activities. Parents with higher levels of education may place more value on the arts or exploring new activities together as a family, which could increase the cultural capital of their children and lead to an increased recognition of existing cultural capital by their children's teachers. This could, in turn, lead to increased preferential treatment. The result of increased attention could lead to increased performance and bring the cycle of increased performance → increased significant others' encouragement → increased performance full circle and continue to perpetuate it (Collier & Morgan, 2008; Dumais, 2002; Horvat, 2001; Lareau & Weininger, 2003). Parental encouragement is the single most important factor related to the development of college-going aspirations (Cabrera & La Nasa, 2000; Coleman, 1988; Corwin et al., 2005; Horn & Nunez, 2000; Hossler et al., 1989; Hossler et al., 1999; Inoue, 1999; Paulsen, 1990; Perna & Titus,

2005; Sewell et al., 1969; Sewell & Shah, 1968; Tierney & Auerbach, 2005) and parents demonstrate this through the values and goals they communicate to the young people around them. As Coleman (1988) showed, parents' expectations can influence their children's friends as easily as their own children.

How cultural capital interacts with college aspirations is also impacted by the high school attended. McDonough (1997) compared the constant and consistent messages of going to college that students at a private college preparatory school received from everyone around them to the less consistent and lower aspiration messages from parents, friends' parents, peers, teachers, and school counselors received by students attending a public high school with a much lower level of financial resources and academic reputation. In addition to leading to higher levels of college-going aspirations, parental encouragement and cultural capital may also result in greater levels of extracurricular involvement in high school athletics, fine arts, or other school-sponsored or community-based activities (Bergerson, 2007; Bourdieu, 1977; Collier & Morgan, 2008; Dumais, 2002; Horvat, 2001; Lamont & Lareau, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003).

Cultural capital influences the search and choice stages when students search to find colleges where they will be like their peers in terms of academic, social, and cultural fit (Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005).

Regarding course selection theory, how cultural capital will shape the predisposition stage of the theory will also be determined primarily by parent's levels of education and encouragement and students' extracurricular involvement. Because

parent's education is a component of family socioeconomic status, it is possible that the type of high school attended can also play a role because continuing generation students may have gone to more affluent high schools. Students matriculating from well respected high schools may feel they are well prepared for the challenges of college life while those students coming from less affluent high schools may more readily understand the value of participating in a first-year transition seminar. This latter point is more likely to be true if these students are targeted as possible candidates for the course based on their admissions profiles. It is also possible students with higher levels of cultural capital will have more opportunities for extracurricular activities. This could be because these students do not have to work part-time and thus have time to engage in high school athletics, fine arts, or other school-sponsored or community-based activities. Parent's level of income will play into this as well. For instance, higher levels of income make it more likely students or families can pay participation fees, equipment or instrument fees, or for private coaching or instruction.

As students search for courses to enroll in during their first-semester on campus, they will seek out courses where they will have classmates like themselves, similar to how they search for colleges that admit students similar to themselves. Students will want to register for courses where they can fit in academically, socially, and culturally. Students with more affluence, exposure to cultural activities, and from academically stronger high schools will matriculate with greater and more diverse high school achievements. These students, or more importantly their parents, may have different academic goals for their first semester on campus (Horvat, 2001; Hossler et al., 1989; Paulsen, 1990). Paulsen (1990) found that the higher the level of parent's education, the

more likely students were to be interested in the social backgrounds and extracurricular involvement of their peers at the colleges they were considering. Students whose parents had lower levels of education were more interested in “rules and regulations affecting students, and the careers to which the college might lead” (p. 48). First-generation students may have parents or older siblings willing to serve as “cultural brokers” (Tierney & Auerbach, 2005, p. 32) who are more likely to encourage enrolling in a first-year transition course. This may also be true for continuing generation students from less affluent families with less cultural capital.

Cultural capital has been an independent variable in research measuring the development of college-going aspirations (Cabrera & La Nasa, 2000; Coleman, 1988; Corwin et al., 2005; Horn & Nunez, 2000; Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999; Inoue, 1999; Paulsen, 1990; Perna & Titus, 2005; Sewell et al., 1969; Sewell & Shah, 1968; Tierney & Auerbach, 2005). These constructs have been shown to have positive impacts on academic success in college (Collier & Morgan, 2008; DiMaggio & Mohr, 1985; Pascarella et al., 2004; Rice & Darke, 2000; Walpole, 2003) as have studies researching first-year students participating in first-year transition programs. Cultural capital has not, however, been studied as an independent variable in the decision-making process of voluntary enrollment in a college transition course or seminar. The impact cultural capital has on students’ voluntary decisions to enroll in a first-year transition course or seminar is a focus of this study and is directly related to the following research question: *What is the effect of cultural capital on the decision to voluntarily enroll in a college transition course or seminar?*

Background Variables

The individual and demographic background variables included in this study were gender, measures of students' locus of control, and measures of other academic-related skills. These factors, like several independent variables specifically connected with one of the forms of capital (e.g., family socioeconomic status, level of parental involvement in the college choice process, appreciation of the arts or diversity) relate to students' individual and family habitus. As discussed earlier, the habitus each of us develops and internalizes shapes how we identify choices that may be viewed as reasonable or sensible in our own or family contexts and allows for the nexus of habitus and bounded rationality. Gender, locus of control, and other academic-related skills may collectively impact students' beliefs about what is or is not expected or attainable in addition to building or adding to self-esteem, self-confidence, and an internal locus of control, or the belief that actions and outcomes can be controlled by the individual and mastery of academic-related skills is not the result of predetermined fate or destiny (Collet, 2009; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Pascarella et al., 1996; Paulsen & Gentry, 1995; Perna, 2000; Pintrich, 1995; Ryan & Glenn, 2004; Salisbury et al., 2010).

Gender

Gender was important to this study, partly because the majority of first-year students at this university are typically female (Office of the Registrar, 2010), but specifically because societal expectations of gender roles and decision-making can vary (Galotti & Mark, 1994; Mansfield & Warwick, 2006; Sax, 2008) and could influence the experiences first-year students choose as well as how they respond to feedback or advice

from parents. Over the past two decades, gender has steadily moved to the forefront in higher education research. What was once merely an independent variable researchers would automatically control for has become an interesting, and sometimes important, independent variable in prediction, evaluation, and interpretation. Studying the influences of gender has become increasingly important in light of the increased participation and graduation rates of women in higher education (Mansfield & Warwick, 2006; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998).

Locus of Control and Academic-Related Skills

Locus of control is the extent to which individuals are self-directed or believe they have the ability to determine their own fate. Individuals who possess a strong sense of internal control are more likely to believe they are responsible for what happens to them while people who are more externally directed will think that their destiny in a particular context is determined more by luck, fate, or other people. Locus of control may influence course selection, particularly a first-year seminar designed to assist students with the academic and social transitions to college, based on whether or not matriculating students have an internal or external locus of control (Lundgren & Rudawsky, 1998; Salisbury et al., 2010). Pascarella et al. (1996) suggested that college students with an internal locus of control consistently outperform their peers with an external locus of control on a range of academic performance and achievement motivation measures. In their report of nonacademic factors and retention, Lotkowski, Robbins, and Noeth (2004) found academic self-confidence, academic-related skills (e.g., time management and study skills), and academic goals (i.e., commitment to earn a degree) to be the strongest nonacademic factors in predicting retention or performance.

Ryan and Glenn (2004) examined two different forms of first-year intervention models: learning strategies models and academic socialization models. Learning strategies models are grounded in the belief that active learning skills can be taught and first-year students may not arrive on campus equipped with all of the skills they need to be academically successful, persist, and graduate. This is in contrast to the academic socialization model, which is patterned after Tinto's model of persistence and focuses on academic and social integration. Ryan and Glenn found students who participated in seminars focusing on learning strategies were able to identify factors that they could control and manipulate (e.g., time management or test taking strategies) that could lead to better and more successful academic performance. The students in the academic socialization based seminars were not taught active learning skills. When these students internalized their academic failings, they were unable to identify variables that they could change to become more academically successful. Compared to their peers using learning strategies models, they internalized beliefs that they could not be successful in college and were more likely to leave the institution – in other words, they enhanced an external locus of control.

The findings by Ryan and Glenn (2004) are similar to the results gathered by researchers studying self-regulated learning. Self-regulated learners exhibit three primary characteristics. The first is they attempt to control their behavior, motivation, affect, and cognition. Second, self-regulated learners have goals they are trying to reach. The third characteristic is that it is the students themselves and not parents, teachers, or peers who are in control of their actions. Students who have not mastered the role of self-regulated learners may be unaware they can consciously control their actions and strategies related

to these characteristics and learning (Paulsen & Gentry, 1995; Pintrich, 1995; Wolters, 1998).

Background variable's relationship to the college choice model and course selection theory

Gender differences have been found in the way that men and women evaluate and select colleges and these differences can be demonstrated through the forms of capital already reviewed. Examining gender differences and financial capital indicates that parents are more likely to save for college for sons than for daughters. As a result, female first-year students are more likely to have concerns about financing their college educations in addition to placing more importance on the availability of financial aid (Bouse & Hossler, 1991; Sax, 2008). Salisbury et al. (2010) found that levels of parental education, which can be associated with social and cultural capital (although in this study it is included with financial capital because of its effect on socioeconomic status), had a positive impact on the decision by female students to study abroad. From a cultural capital perspective, prospective female students have been found to place more importance on enrolling at a campus with racial or ethnic diversity, a friendly atmosphere, and a variety of culturally-related events than their male counterparts (Galotti & Mark, 1994; Mansfield & Warwick, 2006; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998).

Specific to social capital's influence on the college selection or course selection processes, women have consistently placed more importance on the advice of parents (particularly fathers), family, and friends compared to men, who tended to rely more on coaches; males also cited a prominent athletic department as an important criteria in the college choice process. Women were also more concerned with the location and

academic reputations of the colleges and universities they were considering (Galotti & Mark, 1994; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Shank & Beasley, 1998).

Regarding course selection theory, these differences in gender effects are related to habitus and to the amounts of various forms of capital accumulated before enrolling in college. Each of these factors, and in particular the importance placed on parental advice or encouragement – as it related to both the expectation of going to college and which college to attend – may impact the decision to enroll in a first-year transition seminar. Continuing generation students who have parents with higher levels of education may not receive encouragement to enroll in the first-year transition seminar and this may have a particularly strong effect on female students.

First-year transition seminars are often combinations of the pure forms of learning strategy and academic socialization models studied by Ryan and Glenn (2004) and include the topics of time management, study skills, test taking strategies, motivation or goal setting, health and relationship related topics, financial management, and the overall academic and social integration into the larger campus community (Barefoot, 2004; Bolender, 1994; Coleman & Freedman, 1996; Engle et al., 2004; Gordon & Grites, 1984; Lipsky & Ender, 1990; Myers, 2003; Ness et al., 1989; Ryan & Glenn, 2004; Upcraft et al., 2005; Wilkie & Kuckuck, 1989). Students who have, at least in their own opinions, developed a strong internal locus of control may believe that a transition course or seminar designed to develop or increase a sense of internal locus of control will not be needed to assist with their transition and success in college.

Gender and locus of control, along with other academic-related skills, have each

been independent variables in research focusing on decision-making processes related to college and on students' academic success in college (Bouse & Hossler, 1991; Galotti & Mark, 1994; Lotkowski et al., 2004; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Pascarella et al., 1996; Paulsen & Gentry, 1995; Pintrich, 1995; Ryan & Glenn, 2004; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998; Wolters, 1998). These types of individual background variables have not, however, been studied as independent variables in the decision-making process of voluntary enrollment in a college transition course or seminar. The impact these types of individual background variables have on students' voluntary decisions to enroll in a first-year transition course or seminar is a focus of this study and is directly related to the following research question: *What is the effect of individual background characteristics on the decision to voluntarily enroll in a college transition course or seminar?*

Summary and Conclusion

Colleges and universities have become increasingly concerned with retention efforts as they have recognized the necessity for first-year students to transition well academically and socially to their campuses (Barefoot, 2004; Ryan & Glenn, 2004). Numerous studies have been done investigating the variables that may predict successful academic performance (Aiken, 1964; Camara & Echternacht, 2000; DeBerard et al., 2004; Di Stefano et al., 2005; Hahs-Vaughn, 2004; Hood, 1992; Ishitani, 2003; Jones, 2000; Livengood, 1992; McCarron & Inkelas, 2006; Moore, 2004; Nelson & Nelson, 2003; Pascarella et al., 1996; Pascarella et al., 2004; Pfeifer & Sedlacek, 1971; Snyder et al., 2003; Terenzini et al., 1996; Ting, 1997). Included in this research is the positive effect that participation in first-year seminars or courses designed to aid in the academic

and social transitions to college have on all students regardless of their academic or demographic backgrounds (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001).

In spite of these consistently significant research findings, there is a history of institutions targeting transition courses to at-risk students. How students may make the voluntary choice to enroll in these first-year courses, however, has not been studied. Unless students are required to take one or more specific courses their first semester they may have a great deal of freedom and flexibility in the courses they choose to take and when they take them. This is particularly true for first-year transition seminars or similar courses. A greater understanding of the factors that explain which students do and do not voluntarily enroll in these courses can assist administrators charged with improving or maintaining retention and graduation rates and setting institutional policy.

To understand how and why students decide whether or not to enroll in a college transition course or seminar and why they make the decision they do, it is important to examine the student choice construct and models involving college choice decisions. To review, the student choice construct includes sociological and cultural theories and proposes that students make sequences of choices in situated contexts and these choices are influenced by diverse backgrounds, family backgrounds, and environmental variables. The advantage of the student choice construct, particularly when connected with an increasingly more heterogeneous first-year student population, is that researchers are able to study diverse college students on their own terms while incorporating the students' unique circumstances and experiences. This allows researchers to focus on how students' decisions related to college choices are effected by social and cultural influences. Diverse

groups of students make diverse groups of choices, but their choices are made in situated contexts specific to each individual student. The student choice construct is different from past theories involving student outcomes that have relied on the assumption that students had a certain amount of flexibility when it came to economic, social, and geographic mobility; these assumptions are incorrect with the increasingly heterogeneous first-year students of today (McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 2002; Perna, 2006; Perna & Titus, 2005; Salisbury et al., 2009; Salisbury et al., 2010; St. John et al., 2001).

The purpose of this study was to address this gap in the literature by using the student choice construct (Paulsen & St. John, 1997, 2002; St. John et al., 2001) and adapting combined, or modern, college choice models (Hossler et al., 1999; Paulsen, 1990; Perna, 2006; Perna & Titus, 2005) to develop a theory to explain course selection decisions. Modern college choice theory is a combination of human capital theory and status-attainment theory, the two traditional college choice theories. Human capital, or economic theory, involves students using a cost-benefit analysis to determine the value and benefits of both going or not going to college and selecting which institution to attend. Status-attainment theories seek to determine how individuals attain and pass on occupational status or prestige. These theories attempt to explain educational and occupational choices through the interactions of factors such as academic aptitude, academic performance, parent's socioeconomic status, influence of family, teachers, and peers, and levels of educational aspirations (Becker, 1962; Bishop, 1975; Hossler et al., 1989; Hossler et al, 1999; Inoue, 1999; Paulsen, 1990; Radner & Miller, 1970; Sewell et al., 1969; Sewell et al., 1957; Sewell & Shah, 1968; Schultz, 1982; Young & Reyes,

1987).

The traditional models of college choice were developed by studying white males in the 1960s and, over time, higher education researchers began to realize the inadequacy of these models (Inoue, 1999; Sewell et al., 1969; Tierney & Auerbach, 2005; Tierney & Colyar, 2005; Young & Reyes, 1987). As the gender, class, and racial demographics of first-year students began to change, theoretical frameworks began changing with them (Evans, 1996; Paulsen & St. John, 2002). In the 1990s, theories governing college choice research underwent a revolution and began incorporating social class as a catalyst for research on college students and added the student choice construct to traditional models of human capital or status attainment theory. The creation of a theoretical framework that included sociological and cultural theories (e.g., Perna, 2006) has enabled researchers to begin emphasizing the important role played by habitus, a social-class based phenomenon, and the ways the various forms of capital may exist and be acquired in the process of choosing whether or not and where to go to college (Horvat, 2001; McDonough, 1997; Paulsen, 1990; Paulsen & St. John, 1997, 2002; Perna, 2000, 2006; Perna & Titus, 2005; St. John et al., 2001).

There is a growing literature that examines the effects of socio-cultural factors, such as habitus and financial, human, social and cultural capital, as well as economic and sociological factors, on students' college choice (Perna, 2006). But there have been very few studies that have used a logically parallel model to examine the effects of similar factors on students' curricular choices in college (e.g., Salisbury et al., 2009; Salisbury et al., 2010) and no studies of the effects of such factors on whether or not students voluntarily enroll in a first-year transition course or seminar. Therefore, the present study

is intended to address all of these gaps in the current literature. Figure 1 and Figure 2 visually display the college choice model and course selection model, respectively, that provide the conceptual framework for this study.

The underlying factor connecting each construct in the models is habitus. Habitus includes the beliefs, value systems, and boundaries that are internalized throughout our lives that influence the roles we play, with whom, and where we play them. Habitus provides the context for interconnections between each form of capital. Habitus is social-class based and is developed subconsciously during childhood through observation of the immediate family and how members participate in their social class, community, and school environments. It teaches us what responses and reactions are appropriate in any situation through an interpretation and understanding of our place within each group. High school students will believe that certain options will exist after graduation – attending a four-year school, enrolling in a two-year school, getting a job, or joining the military – that are consistent with their individual or family habitus (Dumais, 2002; Horvat, 2001; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2000, 2006; Perna & Titus, 2005; Walpole, 2003).

Human capital is most often thought of as the combination of knowledge, skills, abilities, attitudes, and talents each individual has that they may use to enhance their potential to be productive. This productive capacity can be loaned out to an employer in exchange for salary and benefits. Individuals with higher levels of knowledge, ability, or talent may demand or expect greater compensation in exchange for their work (DesJardins & Bell, 2006; Paulsen & Toutkoushian, 2008; Perna & Titus, 2005). Human capital is often measured by assessing academic achievement (e.g., standardized test

College Choice Model

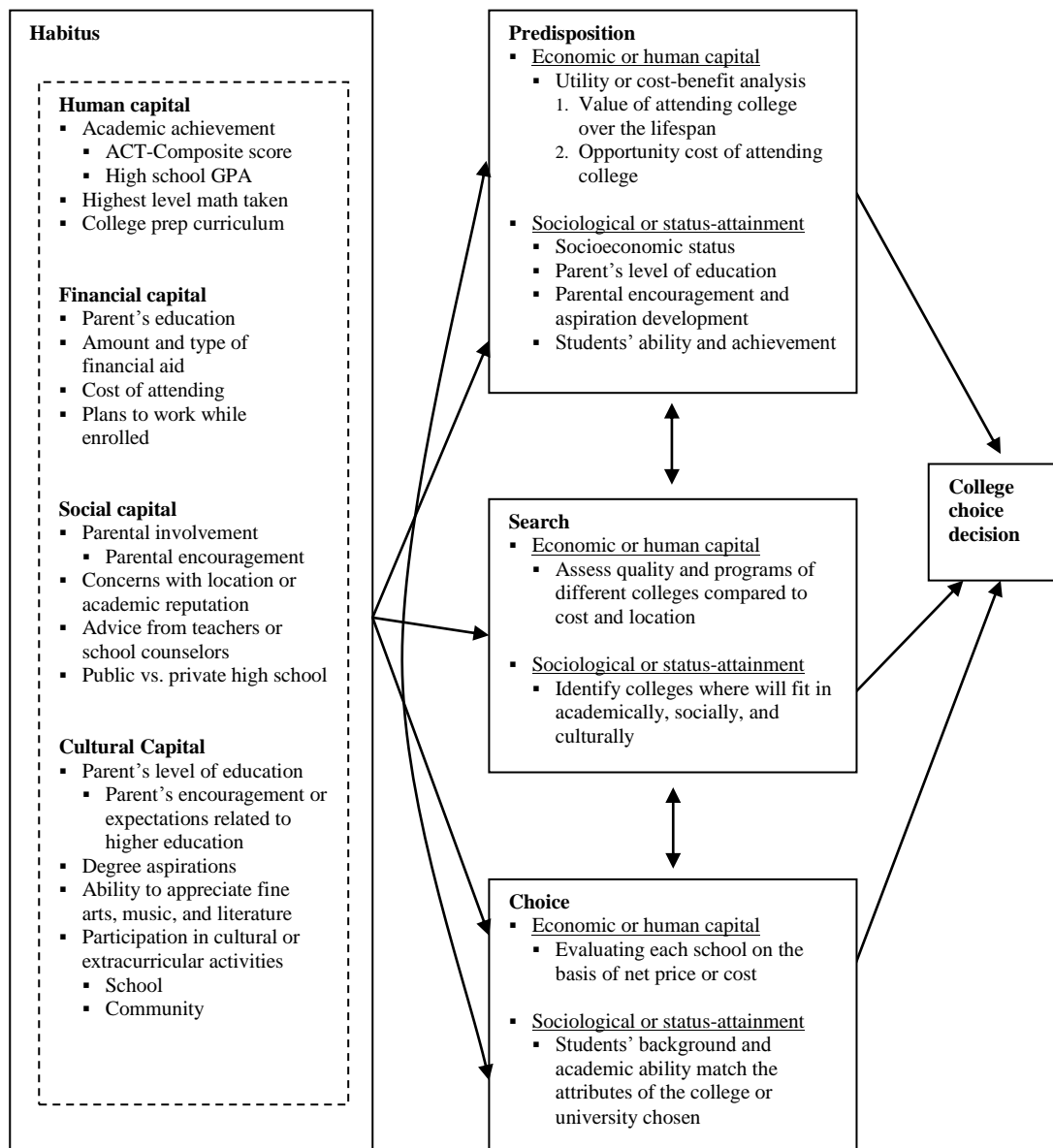


Figure 1. Combining a college choice model with the student choice construct to model the decision-making process of deciding whether or not to go to college

Source: Adapted from Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and enrollment: An examination of racial/ethnic differences. *The Journal of Higher Education*, 76, 485-518, and Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. Smart (Ed.), *Higher education: Handbook of theory and research*, Vol. XXI (99-157). The Netherlands: Springer.

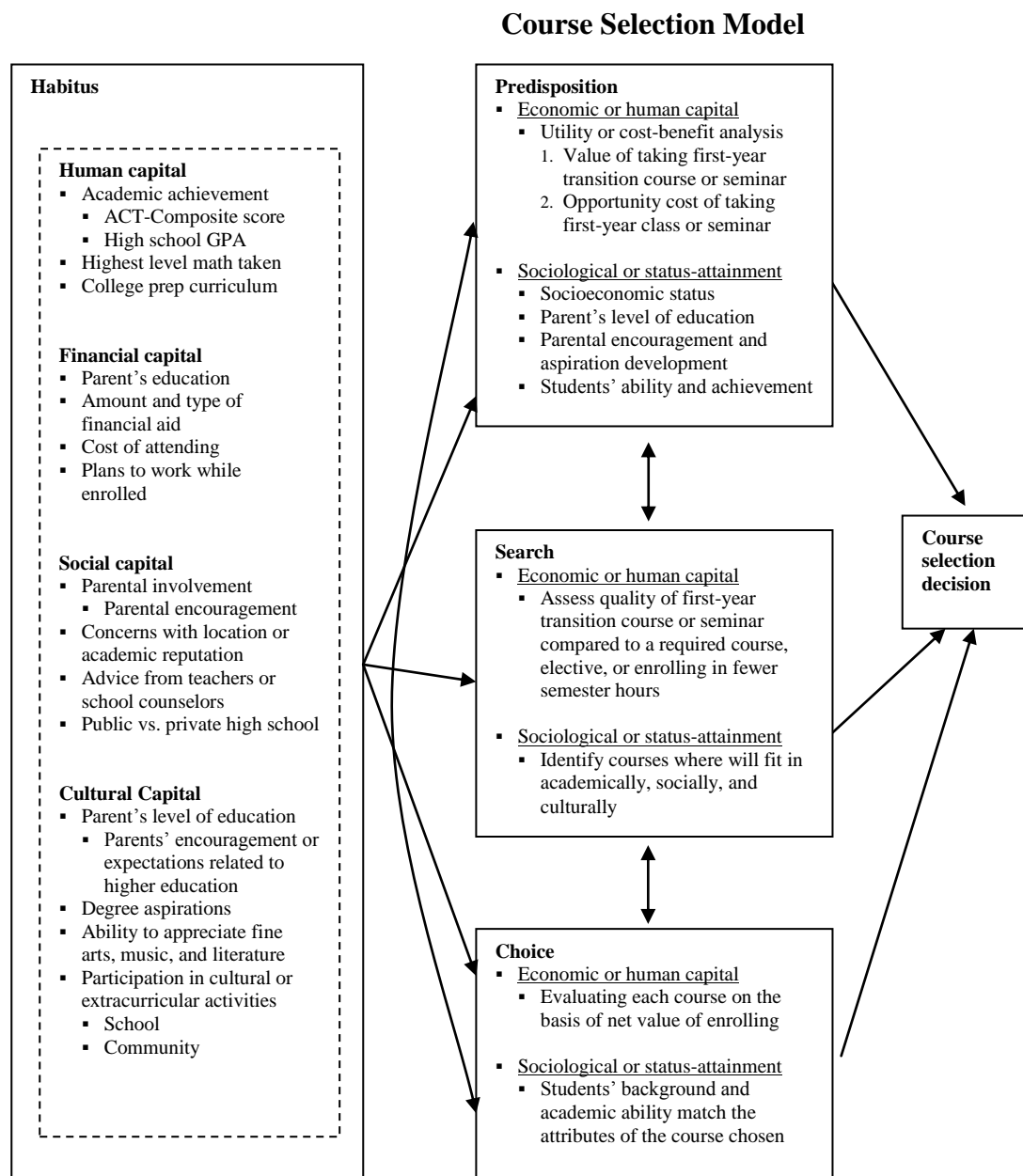


Figure 2. Combining a college choice model with the student choice construct to model the decision-making process of voluntarily enrolling in a first-year transition course or seminar

Source: Adapted from Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and enrollment: An examination of racial/ethnic differences. *The Journal of Higher Education*, 76, 485-518, and Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. Smart (Ed.), *Higher education: Handbook of theory and research*, Vol. XXI (99-157). The Netherlands: Springer.

scores or high school grade point average) or preparation (e.g., whether or not a college preparation curriculum was followed) (Perna & Titus, 2005).

Measures of human capital have regularly been used as independent variables in studies focusing on first-year student success and retention. High school achievement and academic aptitude have also been incorporated into studies of first-year transition programs (Barefoot, 2004; Bolender, 1994; Camara & Echternacht, 2000; Coleman & Freedman, 1996; Di Stefano et al., 2005; Fidler, 1991; Hood, 1992; Lipsky & Ender, 1990; Moore, 2004; Muraskin, 1998; Murtaugh et al., 1999; Pfeifer & Sedlacek, 1971; Snyder et al., 2003; Williford et al., 2001). There has been very little work on predicting first-year students' voluntary enrollment in a college transition seminar and human capital has not been studied as a determinant in this decision. Therefore, the impact human capital has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study. Human capital was assessed using data (e.g., ACT-Composite scores and high school grade point averages) from the institution's Office of Admissions and Office of the Registrar; see Table 2 in Chapter III for a complete list of variables measuring human capital.

Financial capital is determined by a family's income or wealth. It is the presence or lack of financial capital that will help determine a family's social class, community, and school environment (i.e., the quality of the public schools where they can afford to live and whether or not private schools are available and affordable). In higher education, financial capital has most often been studied from the perspective of low income or first-generation students. When combined, first-generation status and low socioeconomic status can negatively influence whether or not high school students choose to, or even

consider the possibility of, going to college. First-generation college students are more likely to continue living at home, not be actively involved in campus life, work close to full-time (usually off-campus), and enroll only part-time. Habitus may play a role if going to college is seen as nonessential and the students are responsible for covering the cost of their education. All of these factors can impact first-year academic success (Choy, 2001; Lohfink & Paulsen, 2005; London, 1989; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Terenzini et al., 1996; Walpole, 2003; York-Anderson & Bowman, 1991).

In past studies of predictors of first-year student retention and performance, financial capital has often been used as an independent variable by including family socioeconomic status, first-generation student status, or both. Financial capital has also been a factor in research on outcomes associated with first-year transition programs (Barefoot, 2004; Boudreau & Kromrey, 1994; Choy, 2002; Hans-Vaughn, 2004; Inman & Mayes, 1999; Ishitani, 2003; Lohfink & Paulsen, 2005; London, 1989; McCarron & Inkelas, 2006; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Terenzini et al., 1996; Walpole, 2003; York-Anderson & Bowman, 1991). There has been very little work on explaining first-year students' voluntary enrollment in a college transition seminar and financial capital has not been studied as a determinant in this decision. The impact financial capital has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study. Financial capital was assessed using data from the institution's Office of Student Financial Aid (e.g., whether or not the student received a Pell Grant) and student responses to questions on the Entering Student Survey dealing with parent's level of education and plans to work while

enrolled; see Table 3 in Chapter III for a complete list of variables measuring financial capital.

Social capital manifests itself in the social groups we belong to through the interplay between the obligations owed to one another and the information that can be shared. The social capital relevant to choosing whether or not to go to college presents itself primarily through the level of parental involvement involved in the college choice process (Bergerson, 2007; Choy, 2001; Coleman, 1988; Horn & Nunez, 2000; Horvat, 2001; Hossler et al., 1999; McDonough, 1997; Pascarella et al., 2004; Perna & Titus, 2005; Portes, 1998; Walpole, 2003). The role that parental encouragement, the most common measure of parental involvement, plays in choosing to go to college cannot be understated. Parental encouragement has consistently been found to be the single most significant factor effecting college aspirations even when controlling for parent's levels of education or income. Examples of manifestations of social capital through parental involvement can be seen in early and frequent communication between parent and child about expectations of going to college. Parents become involved in high school curricular choices when they actively encourage their son or daughter to take an advanced mathematics course. Saving for college, regardless of the amount the family can save, is another important way parents can communicate an expectation of going to college (Cabrera & La Nasa, 2000; Corwin et al., 2005; Horvat, 2001; Hossler et al., 1989; Horn & Nunez, 2000; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005). Coleman's (1988) study of communities and intergenerational closure provides an excellent example of the workings of social capital.

Research on the development of college-going aspirations, as well as student

success and retention, has often utilized social capital as an independent variable. Measures of social capital have been shown to be positively related to both academic success in college and outcomes of first-year students participating in first-year transition programs (Bergerson, 2007; Cabrera & La Nasa, 2000; Choy, 2001; Coleman, 1988; Corwin et al., 2005; DiMaggio & Mohr, 1985; Horn & Nunez, 2000; Hossler et al., 1989; Hossler et al., 1999; Inoue, 1999; Lamont & Lareau, 1988; Lohfink & Paulsen, 2005; McDonough, 1997, 2005; Pascarella et al., 2004; Paulsen, 1990; Perna & Titus, 2005; Portes, 1998; Sewell et al., 1969; Sewell & Shah, 1968; Tierney & Auerbach, 2005; Walpole, 2003). There has been very little work on explaining first-year students' voluntary enrollment in a college transition seminar and social capital has not been studied as a determinant in this decision. Therefore, the impact social capital has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study. Social capital was assessed using student responses to questions on the Entering Student Survey concerning parental involvement in the college choice process and data from the institution's Office of Admissions for the type of high school attended; see Table 4 in Chapter III for a complete list of variables measuring social capital.

Cultural capital is the representation of symbolic wealth that defines upper- and middle-class families and is passed on to succeeding generations to sustain it (Paulsen & St. John, 2002; Perna & Titus, 2005). Cultural capital is developed in individual families through their actions, such as trips to the theatre, concerts, or museums, and results in access to and familiarity with the cultural knowledge and values, educational credentials, linguistic structures and school-related information of the dominant classes (Bourdieu,

1977; Dumais, 2002; Horvat, 2001; Lamont & Lareau, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003). Schools, too, reproduce and distribute cultural capital by institutionalizing it. The schools do not provide or teach their students about cultural capital, but students must acquire it to access academic credentials and educational rewards from their families (Bergerson, 2007; Collier & Morgan, 2008; Dumais, 2002; Lamont & Lareau, 1988; Walpole, 2003). For students without the general knowledge of culture that is often learned in the homes of upper- and middle-classes, the same educational system that rewards this knowledge penalizes students (e.g., those from lower socioeconomic classes) that do not possess high levels of cultural capital (Lamont & Lareau, 1988).

The type of high school attended (e.g., public versus private) can make a difference. It is assumed that students with lower levels of cultural capital who may be from less affluent public schools will have limited working knowledge of colleges or universities, prerequisites for enrolling, and the differences between two- and four-year colleges or public and private schools. It is also assumed the resources necessary to bridge the gap in these schools may be deficient in less affluent schools. When family cultural capital is lacking, this can become even more dramatic when students begin relying less on their parents and more on their school counselors, teachers, and peers (Hossler et al., 1999; McDonough, 1997, 2005).

Another important way cultural capital can impact individual students is through their level of involvement in high school. Students with lower levels of cultural capital tend to spend less time socializing with peers (Nunez & Cuccaro-Alamin, 1998; Terenzini et al., 1996) and participating in extracurricular activities. Together, these

differences can impact the development of college-going aspirations (Hossler et al., 1999) and academic success (Rice & Darke, 2000). This may continue after matriculating, particularly when caused by some of the same factors that impact the initial accumulation of cultural capital. As an example, a student from a lower socioeconomic home may need to hold a job while going to school and have less time for peer interaction or participation in extracurricular or student life activities at both the high school and college levels.

Cultural capital has been used quite often in studies focusing on the development of college-going aspirations (Alwin & Otto, 1977; Boyle, 1966; Hossler et al., 1989; Hossler et al., 1999; Inoue, 1999; Sewell et al., 1969; Sewell & Shah, 1968; Tierney & Auerbach, 2005; Tierney & Colyar, 2005). These constructs have been shown to have positive impacts on academic achievement, persistence, and the effects of completing a first-year transition course or seminar (Collier & Morgan, 2008; Corwin et al., 2005; Davis, 1992; Dumais, 2002; Engle et al., 2004; Fidler, 1991; Hearn & Holdsworth, 2005; Hossler et al., 1999; Inoue, 1999; Lamont & Lareau, 1988; Lareau & Weininger, 2003; Lohfink & Paulsen, 2005; McDonough, 1997; Muraskin, 1998; Nunez & Cuccaro-Alamin, 1998; Perna & Titus, 2005; Rice & Darke, 2000; Sewell et al., 1969; Sewell et al., 1957; Sewell & Shah, 1968; Sidle & McReynolds, 1999; Terenzini et al., 1996; Tierney & Colyar, 2005; Williford et al., 2001). There has been very little work on explaining first-year students' voluntary enrollment in a college transition seminar and cultural capital has not been studied as a determinant in this decision. Therefore, the impact cultural capital has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study. Cultural capital was assessed using

student responses to questions on the Entering Student Survey concerning the development of college-going aspirations and extracurricular participation; see Table 5 in Chapter III for a complete list of variables measuring cultural capital.

Background variables included in this study were gender, measures of students' locus of control, and measure of other academic-related skills. Many of these variables are associated with a form of capital and related to students' individual and family habitus. Working together, all of these variables affect their beliefs about what is or is not attainable as well as impacting their sense of locus of control (Collet, 2009; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Pascarella et al., 1996; Paulsen & Gentry, 1995; Perna, 2000; Pintrich, 1995; Ryan & Glenn, 2004; Salisbury et al., 2010).

Gender was important to this study given the increased participation and graduation rates of women in higher education (Mansfield & Warwick, 2006; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998) as well as because of the societal expectations of gender roles and differences in decision-making by gender (Galotti & Mark, 1994; Mansfield & Warwick, 2006; Sax, 2008). These differences have the ability to influence the experiences first-year students select as well as how each gender responds to feedback or advice from parents regarding college-related decisions. Parents are more likely to save for college for males than for females who, in turn, have been found to have more interest in financial aid and concerns related to affordability (Bouse & Hossler, 1991; Sax, 2008). Women have been found to place more importance on the location and academic reputation of the colleges they are considering as well as on enrolling at a campus with racial or ethnic diversity, a friendly atmosphere, and a variety of culturally-related events than prospective male students (Galotti & Mark, 1994;

Mansfield & Warwick, 2006; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998). Research has also shown female students to place more importance on the advice of parents, family, and friends compared to male students, who have tended to rely more on coaches (Galotti & Mark, 1994; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Shank & Beasley, 1998).

Locus of control is the extent to which individuals are self-directed or believe they have the ability to determine their own fate. Individuals who possess a strong sense of internal locus of control are more likely to believe they are responsible for what happens to them while people who are more externally directed will think that their destiny in a particular context is determined more by luck, fate, or other people.

Pascarella et al. (1996) suggested that college students with an internal locus of control would have more academic success in college compared to students with an external locus of control. Lotkowski et al. (2004) discovered that academic self-confidence, academic-related skills (e.g., time management and study skills), and academic goals (i.e., commitment to earn a degree) were the strongest nonacademic factors in predicting college students' retention or performance.

Differences in gender have been found related to habitus and the amounts of various forms of capital accumulated before enrolling in college. Each of these factors may impact the decision to voluntarily enroll in a first-year transition seminar. Continuing generation students who have parents with higher levels education may not receive encouragement to enroll in the first-year transition seminar and this may have a particularly strong effect on female students. Likewise, locus of control may influence course selection – particularly a first-year seminar designed to assist students with the

academic and social transitions to college – based on whether or not matriculating students have an internal or external locus of control. Students who have, at least in their own opinions, developed a strong internal locus of control may believe that a transition course or seminar designed to develop this trait will not be needed to assist with their transition to college.

Gender and locus of control, along with other academic-related skills, have each been independent variables in research focusing on decision-making processes related to college and on students' academic success in college (Bouse & Hossler, 1991; Galotti & Mark, 1994; Lotkowski et al., 2004; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Pascarella et al., 1996; Paulsen & Gentry, 1995; Pintrich, 1995; Ryan & Glenn, 2004; Salisbury et al., 2010; Sax, 2008; Shank & Beasley, 1998; Wolters, 1998). There has been very little work, however, on explaining first-year students' voluntary enrollment in a college transition seminar and these background variables have not been studied as a determinant in this decision. Therefore, the impact gender and locus of control, along with other academic-related skills, has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study. Students' gender was obtained from the university's Office of the Registrar. Locus of control and other academic-related skills was assessed using student responses to questions on the Entering Student Survey concerning whether or not they would need assistance or had concerns with study skills, time management, self-confidence, or keeping up with coursework; see Table 6 in Chapter III for a complete list of background variables.

Higher education has often been seen as one way to achieve the American dream (DiMaggio & Mohr, 1985; Hans-Vaughn, 2004). It is obvious, however, that for some

prospective students the dream may be less realistic. Some students (e.g., first-generation students, students from traditionally underrepresented groups, students from lower socioeconomic classes, and students with lower levels of academic preparedness) are potentially at a disadvantage in terms of retention and graduation compared to their peers. The amount of nonacademic commitments these students may have (e.g., working full- or part-time, their own families and dependents), combined with lower levels of parental encouragement and support and an overall individual or family habitus that does not place a great deal of value on higher education, can make developing college-going aspirations, choosing a college, and ultimately enrolling a difficult task. This is compounded when students with lower levels of human capital come from families with limited or no financial, social, and cultural capital. The educational system is designed to reinforce the dominance of the upper-class in each of these categories rather than assist in the redistribution of each form of capital (Bergerson, 2007; Collier & Morgan, 2008; Corwin et al., 2005; Dumais, 2002; Hearn & Holdsworth, 2005; Lamont & Lareau, 1988; Lareau & Weininger, 2003; McDonough, 1997; Tierney & Colyar, 2005; Walpole, 2003).

For these reasons, colleges and universities have created first-year transition courses or seminars to assist with the academic and social transitions first-year students are faced with when they arrive on campus. These programs are often targeted at various at-risk groups of students (e.g., first-generation students, students from traditionally underrepresented groups, students from lower socioeconomic classes, and students with lower levels of academic preparedness) and whether or not students whose admissions profiles do not fit into one or more of these groups enroll may be an institutional afterthought. Research has shown, however, that all students who participate in a first-

year experience will benefit from the course regardless of their levels of human, financial, social, and cultural capital (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001). Colleges and universities should not abandon their attempts to increase the retention and graduation rates of underrepresented or at-risk students, but neither should they ignore the additive value from increased retention and graduation rates of *all* of the students who enroll. Because participation in a first-year experience is often not mandatory, it is advantageous for college faculty, administrators, and staff to develop an effective means of determining what student characteristics will explain why first-year students choose to voluntarily enroll in a first-year course or seminar. This study was intended to inform campus communities regarding the development of more effective policy and practice in the design and marketing of first-year experiences.

Organization of the Dissertation

The rest of this dissertation will be arranged over three chapters. Chapter III provides an overview of the methods used in this study with a focus on the sample used, research questions, the operationalization and coding of dependent and independent variables, data collection, and analytical techniques. Chapter IV will discuss results. The dissertation will conclude with Chapter V and a discussion of the results and their implications for theory development, institutional policy and practice, and future research.

CHAPTER III

METHODOLOGY

This chapter provides details about how the study was conducted. The overall research design will be presented first followed by the research questions that guided the study. Next, the sample is described. The dependent and independent variables will be defined along with an explanation of how they were coded. Data collection procedures, the data analysis approaches used, and the conceptual model will be presented. The chapter concludes with the limitations and delimitations of the study.

Research Design and Questions

This study is a quantitative analysis using logistic regression to determine what variables are useful in explaining enrollment-related behaviors of first-year students. In particular, this study examines the course selection choices of first-year students at a large, public, Research I university in the Midwest in an attempt to determine what pre-enrollment characteristics may explain why these students voluntarily enroll in a twelve-week seminar designed to aid in their academic and social transitions to college. Pre-enrollment characteristics fall under the rubrics of background variables consisting of demographic data, indicators of an internal locus of control and perceived academic-related skills, human capital measures of academic achievement and preparedness, financial capital measures of parent's income or wealth and types and amounts of financial aid received, and variables such as parent's level of involvement or encouragement and students' involvement in extracurricular activities that constitute proxies for the more abstract constructs of social capital and cultural capital.

The fundamental question this study hopes to answer is what factors may explain

a first-year student's choice to enroll in a college transition course or seminar. In Chapter II, the literature provided evidence of two distinct types of students with different sets of characteristics that are of particular relevance to exploring this study's central research question. The first consisted of students who were more likely to be the first in their families to go to college who may be less academically prepared for college, more likely to be from lower socioeconomic families, less likely to be actively engaged with teachers, peers, and school counselors while at school, more likely to have attended a high school with limited resources for guidance about the college selection process, have smaller quantities of financial, social, and cultural capital, have a habitus that may not include an emphasis on postsecondary education, and possibly have limited to no parental involvement or support in each of these areas. These students can be considered to be at a disadvantage in terms of their *college-going resources* (Adelman, 1999; Choy, 2001; Hans-Vaughn, 2004; Horn & Nunez; 2000; Hossler et al., 1999; Inman & Mayes, 1999; Ishitani, 2003; Lohfink & Paulsen, 2005; London, 1989; McCarron & Inkelas, 2006; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Perna, 2005; Terenzini, et al., 1996; Walpole, 2003; York-Anderson & Bowman, 1991). These students, however, were found to be more likely to enroll in a college or university with a realistic assessment of their academic strengths and weaknesses and the recognition they need to improve to be successful and graduate (McConnell, 2000; Riehl, 1994). Students disadvantaged in their college-going resources may be more likely to voluntarily enroll in a course or program designed to assist them with the academic and social challenges and transition issues that accompany going to college.

The second type of students are more likely to be continuing generation students, more likely to be better prepared academically for college, be from upper- and middle-class families, have had active community or school involvement in- and out-of-the-classroom, have attended a high school with the necessary resources to provide adequate guidance in the college selection process, have larger quantities of social capital and cultural capital, have a habitus that emphasized the value of earning a college degree, and have parents who were involved in or provided support in each of these areas. As a result of individual perceptions or family habitus, these students may feel that they will more easily transition to the role of college student and, if they encounter difficulty, have easily accessible family or other social group resources to help navigate through the college culture and environment. From the perspective of available or accumulated college-going resources, these students can be considered to be advantaged (Bergerson, 2007; Coleman, 1988; Collier & Morgan, 2008; DiMaggio & Mohr, 1985; Dumais, 2002; Everson & Millsap, 2004; Hossler et al., 1989; Hossler et al., 1999; Lamont & Lareau, 1988; Lareau & Weininger, 2003; McDonough, 1997, 2005; Pascarella et al., 2004; Paulsen, 1990; Paulsen & St. John, 2002; Perna, 2005, 2006; Perna & Titus, 2005; Terenzini et al., 1996; Tierney & Auerbach, 2005; Walpole, 2003).

The research questions guiding this study focused on the effects of access to each of four different forms of capital as well as individual background characteristics (i.e., gender and measures of locus of control and other academic-related skills) on the decision to voluntarily enroll in a college transition course or seminar. Specifically:

- What is the effect of human capital on the decision to voluntarily enroll in a college transition course or seminar?

- What is the effect of financial capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of social capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of cultural capital on the decision to voluntarily enroll in a college transition course or seminar?
- What is the effect of individual background characteristics on the decision to voluntarily enroll in a college transition course or seminar?

Population and Sample

The population was first-year undergraduate students at a public, comprehensive, Research I university in the Midwest during the academic years 2006-2007 and 2007-2008. The sample for this study was 8,389 first-year domestic students (4,190 and 4,199 students, respectively) who completed an institutional Entering Student Survey. This study relied heavily on the use of survey items to measure student acquisition of cultural, social, and financial capital. The perceptions and meanings of many forms of capital, particularly cultural and social capital, are often culturally-defined and culture-specific. In this study, the survey items used were often specific to American society and culture. For this reason, international students were excluded from the sample.

Data Sources and Collection Procedures

Data was collected from the following institutional resources:

Evaluation and Examination Service

Data from the institution's Evaluation and Examination Service included responses to the institution's Entering Student Survey. The Entering Student Survey was

administered to first-year students before they participated in orientation. Students were not given access to a mandatory on-line mathematics placement exam used in orientation until they had completed a minimum of 90% of the survey. The survey completion rate for each cohort was 99%.

Office of Admissions

Data from the institution's Office of Admissions included ACT-Composite scores, high school grade point averages, number of high school mathematics courses taken, and whether or not students followed a college preparatory curriculum and met or exceeded the minimum high school unit requirements in English/language arts, foreign language, science, and social studies required for admission to the university.

Office of the Registrar

Data from the institution's Office of the Registrar included whether or not students earned college credit before enrolling (e.g., Advanced Placement examinations) and confirmation of whether or not the student enrolled in the college transition seminar.

Office of Student Financial Aid

Data from the institution's Office of Student Financial Aid included whether or not students were awarded a Pell Grant as a form of financial aid.

Dependent Variable

Enroll in college transition seminar (EnrollCT)

The dependent variable is whether or not students enrolled in a twelve-week seminar during their first semester that is designed to assist them with the academic and social transition to the university. Students who enrolled in the first-year transition seminar were coded 1 and students who did not enroll were coded 0.

Independent Variables

Human Capital

ACT-Composite score (ACT)

The ACT provides a means of measuring academic knowledge and skills beyond high school grade point average or high school class rank and allows for the comparison of students “who have attended different high schools, completed different courses, received different grades in courses taught by different teachers, and had access to different opportunities and experiences both in and out of school” (Noble and Camara, 2004, p. 283). The ACT is comprised of a series of achievement tests developed to assess critical reasoning and higher-order thinking skills related to English, mathematics, reading, and science. The premise is that the ACT is measuring the skills and knowledge necessary for success in a student’s first year of college that should be gained in a typical high school college preparatory curriculum (Noble and Camara, 2004). ACT-Composite scores were obtained from the institution’s Office of Admissions and are on a continuous scale with a range from 1 to 36. For students who took the SAT, scores were converted to an ACT-Composite score using data provided by the institution.

High school grade point average (HSGPA)

This variable is individual student’s cumulative high school grade point average (GPA) and is on a continuous scale. High school GPAs were obtained from the university’s Office of Admissions and are on a 4.00 scale. It is possible that high school grade point averages can exceed 4.00 if they are weighted and on a 4.00 scale.

English preparation in high school (EnglishPrep)

This measured whether or not students met the university’s admission

requirements and followed a college preparatory curriculum that included four years of English/language arts courses. Data was obtained from the university's Office of Admissions. A design set of three dichotomous variables was created. For the first variable, students who did not meet the English preparation requirement were coded 1 and students who met the English preparation requirement or who met and exceeded this requirement were coded 0. Next, students who met this requirement were coded 1 and students who did not meet the requirement or who met and exceeded this requirement were coded 0. Finally, students who met and exceeded the English preparation requirement were coded 1 (comparison group) and students who did not meet this requirement or who met but did not exceed the requirement were coded 0.

Foreign language preparation in high school (FLPrep)

This measured whether or not students met the university's admission requirements and followed a college preparatory curriculum that included at least two years of courses in a single foreign language. Although only two years of a single language is required for admission, some colleges at the university where this study took place require four years of a single language as part of their general education requirements. Data was obtained from the university's Office of Admissions.

A design set of three dichotomous variables was created. For the first variable, students who did not meet the foreign language preparation requirement were coded 1 and students who met this requirement but took less than four years of a single foreign language or who met the requirement and completed four or more years of coursework were coded 0. Next, students who met this requirement and took less than four years of a single foreign language were coded 1 and students who did not meet this requirement or

who met the requirement and took four or more years of a single foreign language were coded 0. Finally, students who met the admission requirement and took four or more years of a single foreign language were coded 1 (comparison group) and students who did not meet the admission requirement or who met this requirement but took less than four years of a single foreign language were coded 0.

Natural Sciences preparation in high school (NSPrep)

This measured whether or not students met the university's admission requirements and followed a college preparatory curriculum that included three years of science and one full year each of two of the following three courses: biology, chemistry, and physics; the third year could be from one of these or another science category. The amount of sciences classes taken was obtained from the institution's Office of Admissions.

A design set of three dichotomous variables was created. For the first variable, first-year students who did not meet the natural sciences preparation requirement were coded 1 and students who met the natural sciences preparation requirement or who met and exceeded this requirement were coded 0. Next, students who met this requirement were coded 1 and students who did not meet the requirement or who met and exceeded the natural sciences preparation requirement were coded 0. Finally, students who met and exceeded the natural sciences preparation requirement were coded 1 (comparison group) and students who did not meet this requirement or who met but did not exceed the requirement were coded 0.

Social Studies preparation in high school (SSPrep)

This measured whether or not students met the university's admission

requirements and followed a college preparatory curriculum that included three years of social studies courses. Data was obtained from the university's Office of Admissions. A design set of three dichotomous variables was created. For the first variable, students who did not meet the social studies preparation requirement were coded 1 and students who met the social studies preparation requirement or who met and exceeded this requirement were coded 0. Next, students who met this requirement were coded 1 and students who did not meet the requirement or who met and exceeded this requirement were coded 0. Finally, students who met and exceeded the social studies preparation requirement were coded 1 (comparison group) and students who did not meet this requirement or who met but did not exceed the requirement were coded 0.

Mathematics preparation in high school (MathPrep)

This measured whether or not students met the university's admission requirements and followed a college preparatory curriculum that included two years of high school algebra and one year of high school geometry. The amount of mathematics classes taken was obtained from the institution's Office of Admissions.

A design set of three dichotomous variables was created. For the first variable, first-year students who did not meet the mathematics preparation requirement were coded 1 and students who met the mathematics preparation requirement or who met and exceeded this requirement were coded 0. Next, students who met this requirement were coded 1 and students who did not meet the requirement or who met and exceeded the mathematics preparation requirement were coded 0. Finally, students who met and exceeded the mathematics preparation requirement were coded 1 (comparison group) and students who did not meet this requirement or who met but did not exceed the

requirement were coded 0.

Credit by exam in English (ExamEnglish)

This variable measured whether or not students earned college credit in English (e.g., writing or literature) through Advanced Placement (AP), College-Level Examination Program (CLEP), or other types of examinations and was obtained from the institution's Office of the Registrar. Students who earned exam credit in English were coded 1 and students who did not were coded 0.

Credit by exam in natural sciences (ExamNS)

This variable measured whether or not students earned college credit in natural sciences through Advanced Placement examinations (AP), College-Level Examination Program (CLEP), or other types of and was obtained from the institution's Office of the Registrar. Students who earned exam credit in natural sciences were coded 1 and students who did not were coded 0.

Credit by exam in social studies (ExamSS)

This variable measured whether or not students earned college credit in social studies through Advanced Placement (AP), College-Level Examination Program (CLEP), or other types of examinations and was obtained from the institution's Office of the Registrar. Students who earned exam credit in social studies were coded 1 and students who did not were coded 0.

Credit by exam in mathematics (ExamMath)

This variable measured whether or not students earned college credit in mathematics through Advanced Placement (AP), College-Level Examination Program (CLEP), or other types of examinations and was obtained from the institution's Office of

the Registrar. Students who earned exam credit in mathematics were coded 1 and students who did not were coded 0.

Table 2 lists each measure of human capital and where the data came from.

Financial Capital

First-generation student (FGS)

This variable measured each parent's level of education and was self-reported by students on the Entering Student Survey. Responses were on a nominal scale and ranged from a choice of parents did not finish high school to a choice of parents earned a doctorate or professional degree. Students who reported neither parent attended college were coded 1 and students who reported at least one parent attended college were coded 0. Parent's education is a key component of socioeconomic status and an indicator of a family's financial capital. In some research, it has been used as a measure of cultural capital. Because other measures of cultural capital were available, parent's level of education became a useful, appropriate, and important measure of financial capital.

Pell Grant (AmtPellGrant)

This variable measures whether or not students received a Pell Grant as part of their financial aid and was obtained from the institution's Office of Student Financial Aid. This continuous scale variable, measured in thousands of dollars, ranged from \$0 to \$4,050 (4.050), the maximum Pell Grant amount in 2006-2007, or \$4,310 (4.310), the maximum Pell Grant amount in 2007-2008.

Importance of financial aid in the search stage (ImprtnceFinAidSearch)

This variable measured the importance of the availability of financial aid during the search stage of the college choice model and was self-reported by each student on the

Table 2. Measures of Human Capital

Dependent variable (Label)	Data source	Question	Coding
Enroll in college transition seminar (EnrollCT)	Office of the Registrar	Did the student enroll in a college transition seminar?	0 = No 1 = Yes
Independent variable (Label)	Data source	Question	Coding
ACT-Composite score (ACT)	Office of Admissions	What is the student's ACT-Composite score? Combined SAT critical reading and mathematics scores were converted to ACT-Composite scores.	ACT-Composite scores range from 12 to 36
High school grade point average (HSGPA)	Office of Admissions	What is the student's high school grade point average? All high school grade point averages are converted to a 4.00 scale by the Office of Admissions.	HSGPAs range from 1.14 to 7.93
English preparation in high school (EnglishPrep)	Office of Admissions	Did the student meet or exceed the minimum of four years of English/language arts courses required for admission (i.e., the high school unit requirement or HSUR)?	EnglishPrep Did not meet HSUR = (1,0) Met HSUR = (1,0) Met HSUR and > 4 yrs = (1,0) (comparison group)
Foreign language preparation in high school (FLPrep)	Office of Admissions	Did the student meet or exceed the minimum of two years of courses in a single foreign language required for admission (i.e., the high school unit requirement or HSUR)?	FLPrep Did not meet HSUR = (1,0) Met HSUR but < 4 yrs single FL = (1,0) Met HSUR and >= 4 yrs single FL = (1,0) (comparison group)

Table 2. Continued

Natural sciences preparation in high school (NSPrep)	Office of Admissions	Did the student meet or exceed the minimum of three years of science courses required for admission (i.e., the high school unit requirement or HSUR)? Students must take one full year of 2 of the following 3 courses: biology, chemistry, or physics.	NSPrep Did not meet HSUR = (1,0) Met HSUR but < 4 yrs = (1,0) Met HSUR and >= 4 yrs = (1,0) (comparison group)
Social studies preparation in high school (SSPrep)	Office of Admissions	Did the student meet or exceed the minimum of three years of social studies required for admission (i.e., the high school unit requirement or HSUR)?	SSPrep Did not meet HSUR = (1,0) Met HSUR = (1,0) Met HSUR and > 4 yrs = (1,0) (comparison group)
Mathematics preparation in high school (MathPrep)	Office of Admissions	Did the student meet or exceed the minimum of two years of high school algebra and one year of high school geometry courses required for admission (i.e., the high school unit requirement or HSUR)?	MathPrep Did not meet HSUR = (1,0) Met HSUR but < 4 yrs = (1,0) Met HSUR and >= 4 yrs = (1,0) (comparison group)
Credit by exam earned in English (ExamEnglish)	Office of the Registrar	Did the student earn college credit in English through AP, CLEP, or other exams?	0 = No credit 1 = Earned credit
Credit by exam earned in natural sciences (ExamNS)	Office of the Registrar	Did the student earn college credit in natural sciences through AP, CLEP, or other exams?	0 = No credit 1 = Earned credit
Credit by exam earned in social studies (ExamSS)	Office of the Registrar	Did the student earn college credit in social studies through AP, CLEP, or other exams?	0 = No credit 1 = Earned credit

Table 2. Continued

Credit by exam earned in mathematics (ExamMath)	Office of the Registrar	Did the student earn college credit in mathematics through AP, CLEP, or other exams?	0 = No credit 1 = Earned credit
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Entering Student Survey. Responses were on a Likert scale and ranged from essential to not at all important. Students who thought the availability of financial aid was essential were coded 5, very important were coded 4, moderately important were coded 3, slightly important were coded 2, and students who thought the availability of financial aid was not at all important were coded 1.

Importance of cost in the choice stage (ImprtnceCost)

This variable was a measure of whether or not the cost of attending (i.e., tuition and fees) was important in students' institutional choice and was self-reported on the Entering Student Survey. Responses were on a Likert scale and consisted of very important, somewhat important, and not important. Students who responded very important were coded 3, somewhat important were coded 2, and students who responded not important were coded 1.

Concerns with paying for college (AffordConcerns)

This variable measured whether or not students were concerned with having enough money to stay in school and was self-reported by students on the Entering Student Survey. Responses were on a Likert scale and consisted of very concerned, somewhat concerned, and not concerned. Students who were very concerned were coded 3, somewhat concerned with having enough money to stay enrolled were coded 2, and students who were not concerned with having enough money to stay enrolled were coded 1.

Amount plans to work (HrsWillWork)

This measured whether or not students planned to work during their first semester and was self-reported by each student on the Entering Student Survey. A design set of three dichotomous variables was created. For the first variable, students who planned to work between one and twenty hours per week were coded 1 and students who planned to work twenty-one or more hours per week or did not plan to work were coded 0. Next, students who planned to work twenty-one or more hours per week were coded 1 and students who planned to work between one and twenty hours per week or who did not plan to work were coded 0. Finally, students who did not plan to work were coded 1 (comparison group) and students who planned to work between one and twenty hours per week or who planned to work twenty-one or more hours per week were coded 0.

Table 3 lists each measure of financial capital and where the data came from.

Social Capital

Social capital is the inclusion or membership in social groups that allows for passing along the norms, social controls, and trust and authority issues that must be understood to optimize success as well as provide access to imitational resources and support. While social capital can be developed among students, peers, and high school teachers and staff, it is most often passed on through families and is primarily determined by parental involvement. Parental involvement can be with their own children, with their children's friends, and with the parents of their children's friends (Coleman, 1988; Perna & Titus, 2005).

Importance of advice from parents, relatives, or friends
in the choice stage (ImprtnceFamilyAdvice)

This variable measured whether or not advice from parents, relatives, or friends

Table 3. Measures of Financial Capital

Dependent variable (Label)	Data source	Question	Coding
Enroll in college transition seminar (EnrollCT)	Office of the Registrar	Did the student enroll in a college transition seminar?	0 = No 1 = Yes
Independent variable (Label)	Data source	Question	Coding
First-generation student (FGS)	Entering Student Survey	Combination of questions 1a (What is the highest level of education that your mother/guardian completed?) and question 1b (What is the highest level of education that your father/guardian completed?). Respondents select (1) Did not finish high school, (2) HS diploma or GED, (3) Some college, no degree, (4) Vocational-technical certificate or diploma, (5) AA degree, (6) BA or BS, (7) MA, MS, or MBA, (8) Law (JD), or (9) Doctorate or professional.	0 = At least one parent attended college 1 = Neither parent attended college
Pell Grant (AmtPellGrant)	Office of Student Financial Aid	What is the amount of financial aid that the student received from a Pell Grant?	Measured in thousands of dollars
Importance of financial aid in the search stage (ImprtnceFinAidSearch)	Entering Student Survey	18p. When you think about attending the university, how important is the availability of financial aid to you? Respondents select (1) Essential, (2) Very Important, (3) Moderately Important, (4) Slightly Important, or (5) Not at all Important.	1 = Not at all important 2 = Slightly important 3 = Moderately important 4 = Very important 5 = Essential
Importance of cost in the choice stage (ImprtnceCost)	Entering Student Survey	10a. How important was cost of attending (tuition and fees) in your institutional choice? Respondents select (1) Very Important, (2) Somewhat Important, or (3) Not Important.	1 = Not important 2 = Somewhat important 3 = Very important

Table 3. Continued

Concerns with paying for college (AffordConcerns)	Entering Student Survey	20n. How concerned are you with having enough money to stay in school? Respondents select (1) Very Concerned, (2) Somewhat Concerned, or (3) Not Concerned.	1 = Not concerned 2 = Somewhat concerned 3 = Very concerned
Amount plans to work (HrsWillWork)	Entering Student Survey	17. How many hours per week are you planning to work for pay during your first semester on campus? Respondents select (1) 0, (2) 1-10, (3) 11-15, (4) 16-20, (5) 21-30, or (6) More than 30.	HrsWillWork Work 1-20 hrs/wk = (1,0) Work 21+ hrs/wk = (1,0) Work 0 hrs/wk = (1,0) (comparison group)

was important in students' institutional choice and was self-reported by each student on the Entering Student Survey. Responses were on a Likert scale and ranged from very important, somewhat important, and not important. Students who responded very important were coded 3, somewhat important were coded 2, and students who responded not important were coded 1.

Importance of advice from school counselors or teachers in the choice stage (ImprtnceSchoolAdvice)

This variable was a measure of whether or not advice from school counselors or teachers was important in students' institutional choice and was self-reported on the Entering Student Survey. Responses were on a Likert scale and consisted of very important, somewhat important, and not important. Students responding very important were coded 3, somewhat important were coded 2, and students responding not important were coded 1.

Amount of time spent speaking with teachers
outside of class (SpeakTeachers)

This measured whether or not students engaged high school teachers outside of class and was self-reported by each student on the Entering Student Survey. A design set of three dichotomous variables was created. For the first variable, students who spoke to their teachers outside of class between one and six hours per week were coded 1 and students who spoke to their teachers outside of class seven or more hours per week or did not speak to their teachers were coded 0. Next, students who spoke to their teachers outside of class seven or more hours per week were coded 1 and students who spoke to their teachers outside of class between one and six hours per week or who did not speak to their teachers were coded 0. Finally, students who did not speak to their teachers outside of class were coded 1 (comparison group) and students who spoke to their teachers outside of class between one and six hours per week or who spoke to their teachers seven or more hours per week were coded 0.

Importance of location in the choice stage
(ImprtnceLocation)

This variable measured whether or not location was important in students' institutional choice and was self-reported on the Entering Student Survey. A Likert scale was used and responses were very important, somewhat important, and not important. Students who responded very important were coded 3, somewhat important were coded 2, and students who responded not important were coded 1.

Importance of academic reputation in choice stage
(ImprtnceAcadRep)

This variable was a measure whether or not academic reputation (i.e., quality) was important in students' institutional choice and was self-reported by each student on the

Entering Student Survey. Responses were on a Likert scale and ranged from very important, somewhat important, and not important. Students responding very important were coded 3, somewhat important were coded 2, and students who responded not important were coded 1.

High school type (PublicHS)

This variable represents whether the student attended a public high school or a private high school and was obtained from the institution's Office of Admissions. Students who attended a public high school were coded 1 and students who attended a private high school were coded 0.

Table 4 lists each measure of social capital and where the data came from.

Cultural Capital

Cultural capital is developed in an individual family through the actions of the family and is most often defined as the representations of symbolic wealth that define and are passed on in upper- and middle-class families to enable each succeeding generation to define and sustain their class status (Perna & Titus, 2005). Cultural capital examples are being familiar with and having access to the linguistic structures, school-related information, and the educational credentials of the upper- and middle-classes who possess the most valued forms of cultural capital (Bourdieu, 1977; Dumais, 2002; Lamont & Lareau, 1988; Horvat, 2001; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003). From a research perspective, cultural capital has most often been operationalized as knowledge of classical music and participation in the fine arts (DiMaggio, 1982).

Table 4. Measures of Social Capital

Dependent variable (Label)	Data source	Question	Coding
Enroll in college transition seminar (EnrollCT)	Office of the Registrar	Did the student enroll in a college transition seminar?	0 = No 1 = Yes
Independent variable (Label)	Data source	Question	Coding
Importance of advice from parents, relatives, or friends in college choice (ImprtncFamilyAdvice)	Entering Student Survey	10s. How important was advice from parents, relatives or friends in your institutional choice? Respondents select (1) Very Important, (2) Somewhat Important, or (3) Not Important.	1 = Not important 2 = Somewhat important 3 = Very important
Importance of advice from school counselors or teachers in college choice (ImprtncSchoolAdvice)	Entering Student Survey	10t. How important was advice from high school counselors or teachers in your institutional choice? Respondents select (1) Very Important, (2) Somewhat Important, (3) Not Important.	1 = Not important 2 = Somewhat important 3 = Very important
Amount of time spent speaking with teachers outside of class (SpeakTeachers)	Entering Student Survey	3e. During a typical week of your senior year, how many hours did you spend talking with teachers outside of class? Respondents select (1) 0, (2) 1-3, (3) 4-6, (4) 7-9, or (5) 10 or more.	SpeakTeachers 1-6 hrs/wk = (1,0) 7+ hrs/wk = (1,0) 0 hrs/wk = (1,0) (comparison group)
Importance of location in college choice (ImprtncLocation)	Entering Student Survey	10d. How important was location in your institutional choice? Respondents select (1) Very Important, (2) Somewhat Important, or (3) Not Important.	1 = Not important 2 = Somewhat important 3 = Very important
Importance of academic reputation in college choice (ImprtncAcadRep)	Entering Student Survey	10e. How important was academic reputation in your institutional choice? Respondents select (1) Very Important, (2) Somewhat Important, or (3) Not Important.	1 = Not important 2 = Somewhat important 3 = Very important

Table 4. Continued

High school type (PublicHS)	Office of Admissions	Did the student attend a public or a private high school?	0 = Private HS 1 = Public HS
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Degree aspirations (DegreeAspirations)

This measured the students' primary educational goal and was self-reported by each student on the Entering Student Survey. A design set of three dichotomous variables was created. For the first variable, students who aspired to earn a bachelor's degree were coded 1 and students who reported aspirations of earning a graduate or professional degree or who did not have a goal, planned to transfer, or did not plan to earn a four year degree were coded 0. Next, students who aspired to earn a graduate or professional degree were coded 1 and students who reported aspirations of earning a bachelor's degree or reported they did not have a goal, planned to transfer, or did not plan to earn a four year degree were coded 0. Finally, students who did not have a goal, planned to transfer, or did not plan to earn a four year degree were coded 1 (comparison group) and students who aspired to either a bachelor's degree or a graduate or professional degree were coded 0.

Concerns with value of going to college (ValueConcerns)

This variable measured the value students placed on going to college and was self-reported on the Entering Student Survey. Responses were on a Likert scale and included very concerned, somewhat concerned, and not concerned. Students who responded very concerned were coded 3, somewhat concerned were coded 2, and students who responded not concerned were coded 1.

Ability to appreciate fine arts, music, and literature
(ApprecArtMusLit)

This variable represented students' self-assessment of their ability to appreciate fine arts, music, and literature and was self-reported by each student on the Entering Student Survey. Likert scale responses ranged from a choice of excellent to a choice of poor. Students who rated themselves excellent were coded 5, above average were coded 4, average were coded 3, below average were coded 2, and self-ratings of poor were coded 1.

The following items measured extracurricular involvement and were self-reported on a Likert scale by students on the Entering Student Survey. For each of the following items, responses ranged from a choice of very involved to a choice of not involved. Students who were very involved in the activity were coded 4, moderately involved 3, and slightly involved were coded 2. Students who reported they were not involved in the activity were coded 1.

Community service/volunteer work (Service)

This variable measured whether or not students participated in community service or volunteer work during their senior year in high school.

Academic clubs (Clubs)

This variable represented whether or not students participated in academic clubs (e.g., debate, foreign language, Model UN, etc.) during their senior year in high school.

Interest groups (Groups)

This variable measured whether or not students participated in interest groups (e.g., chess, computer, poetry, etc.) during their senior year in high school.

Organizations (Orgs)

This variable indicated whether or not students participated in special interest organizations (e.g., Boy/Girl Scouts, 4-H, etc.) during their senior year in high school.

Political groups (Politics)

This variable represented whether or not students participated in political groups during their senior year in high school.

Racial/Ethnic organizations (RacEthnOrgs)

This variable measured whether or not students participated in racial or ethnic organizations during their senior year in high school.

Publications (Pubs)

This variable indicated whether or not students participated in publications (e.g., student newspaper, yearbook, literary magazines, etc.) during their senior year in high school.

Varsity sports (Varsity)

This variable measured whether or not students participated in varsity sports during their senior year in high school.

Cheerleading/dance team/poms (CDP)

This variable measured whether or not students participated in cheerleading, dance team, or poms during their senior year in high school.

Table 5 lists each measure of cultural capital and where the data came from.

Background Variables

The following independent variables served as background variables for each student included in the sample.

Table 5. Measures of Cultural Capital

Dependent variable (Label)	Data source	Question	Coding
Enroll in college transition seminar (EnrollCT)	Office of the Registrar	Did the student enroll in a college transition seminar?	0 = No 1 = Yes
Independent variable (Label)	Data source	Question	Coding
Degree aspirations (DegreeAspirations)	Entering Student Survey	13. What primary educational goal do you hope to meet by attending the university? Respondents select (1) No Goal, (2) Transfer Credit, (3) Bachelor's degree, (4) Graduate/Professional degree, or (5) Other.	DegreeAspirations 4 yr deg = (1,0) Grad/Prof deg = (1,0) No goal, transfer, or < 4 yr deg = (1,0) (comparison group)
Concerns with value of going to college (ValueConcerns)	Entering Student Survey	20g. How concerned are you with the value of going to college? Respondents select (1) Very Concerned, (2) Somewhat Concerned, or (3) Not Concerned.	1 = Not concerned 2 = Somewhat concerned 3 = Very concerned
Ability to appreciate fine arts, music, and literature (ApprecArtMusLit)	Entering Student Survey	5j. How would you rate yourself on your ability to appreciate fine arts, music, and literature? Respondents select (1) Excellent, (2) Above average, (3) Average, (4) Below Average, or (5) Poor.	1 = Poor 2 = Below average 3 = Average 4 = Above average 5 = Excellent
Senior year extracurricular involvement			
Community service/volunteer work (Service)	Entering Student Survey	2a. During your senior year how involved were you in community service/volunteer work? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved

Table 5. Continued

Academic clubs (Clubs)	Entering Student Survey	2b. During your senior year how involved were you in academic clubs like debate, foreign language, math, Model UN, etc.? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Interest groups (Groups)	Entering Student Survey	2e. During your senior year how involved were you in interest groups like chess, wellness, computing, cinema, etc.? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Organizations (Orgs)	Entering Student Survey	2f. During your senior year how involved were you in special interest organizations like FFA, 4-H, Scouting, etc.? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Political groups (Politics)	Entering Student Survey	2h. During your senior year how involved were you in political groups? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Racial/Ethnic organizations (RacEthnOrgs)	Entering Student Survey	2i. During your senior year how involved were you in racial or ethnic organizations? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved

Table 5. Continued

Publications (Pubs)	Entering Student Survey	2j. During your senior year how involved were you in publications – newspaper, yearbook, literary magazine, etc.? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Varsity sports (Varsity)	Entering Student Survey	2m. During your senior year how involved were you in varsity sports? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved
Cheerleading/dance team/poms (CDP)	Entering Student Survey	2o. During your senior year how involved were you in cheerleading/dance team/poms? Respondents select (1) Very Involved, (2) Moderately Involved, (3) Slightly Involved, or (4) Not Involved.	1 = Not involved 2 = Slightly involved 3 = Moderately involved 4 = Very involved

Gender (Female)

This variable represents whether or not the student is male or female and was obtained from the institution's Office of the Registrar. Female students were coded 1 and male students were coded 0.

Locus of Control

Locus of control is the extent to which individuals are self-directed or believe they have the ability to determine their own fate. Individuals who possess a strong sense of internal locus of control are more likely to believe they are responsible for what happens to them while people who are more externally directed will think that their

destiny in a particular context is determined more by luck, fate, or other people.

Matriculating students who believe they have already developed a strong internal locus of control may believe that enrolling in a first-year academic and social transition course is unnecessary.

The following items measured students' perceptions of their academic-related abilities and internal locus of control and were self-reported by each student on the Entering Student Survey. For each of the following items, students who answered yes were coded 1 and students who answered no were coded 0.

Study skills (HelpStudy)

This variable measured whether or not students felt they would need help with their study skills.

Time management (HelpTimeMgmt)

This variable was a measure of whether or not students felt they needed help with their time management skills.

Money management (HelpMoneyMgmt)

This variable indicated whether or not students felt they would need help with their money management skills.

Locating resources (HelpLocResrcs)

This variable represented whether or not students felt they needed help locating resources.

Self-confidence (HelpSelfConfid)

This variable measured whether or not students felt they would need help with their self-confidence.

The following variables were self-reported by each student on the Entering Student Survey. Responses were on a Likert scale and ranged from a choice of very concerned to a choice of not concerned. For each of the following items, students who responded very concerned were coded 3, somewhat concerned were coded 2, and students who responded not concerned were coded 1.

Concerns with coursework (CourseworkConcerns)

This variable measured whether or not students were concerned with their ability to keep up with coursework.

Concerns with making friends (FriendsConcerns)

This variable was a measure of whether or not students were concerned with their ability to make new friends.

Importance of personal counseling services (ImprtnceCounseling)

This variable was a representation of whether or not students felt access to personal counseling services was important and was self-reported on the Entering Student Survey. Responses were on a Likert scale and ranged from essential to not at all important. Students who believed the availability of personal counseling services was essential were coded 5, very important were coded 4, or moderately important were coded 3. Students who thought the availability of personal counseling services was slightly important were coded 2 and those students who felt it was not at all important were coded 1.

Table 6 lists background, variables and where the data came from.

Missing Values

There were missing values for some of the independent variables in this study.

Table 6. Background Variables

Dependent variable (Label)	Data source	Question	Coding
Enroll in college transition seminar (EnrollICT)	Office of the Registrar	Did the student enroll in a college transition seminar?	0 = No 1 = Yes
Independent variable (Label)	Data source	Question	Coding
Gender (Female)	Office of the Registrar	Is the student male or female?	0 = Male 1 = Female
Locus of Control			
Study skills (HelpStudy)	Entering Student Survey	19a. To be a successful student I will need help with study skills. Respondents select Yes or No.	0 = No 1 = Yes
Time management (HelpTimeMgmt)	Entering Student Survey	19e. To be a successful student I will need help with time management skills. Respondents select Yes or No.	0 = No 1 = Yes
Money management (HelpMoneyMgmt)	Entering Student Survey	19f. To be a successful student I will need help with money management skills. Respondents select Yes or No.	0 = No 1 = Yes
Locating resources (HelpLocResrcs)	Entering Student Survey	19h. To be a successful student I will need help with locating resources. Respondents select Yes or No.	0 = No 1 = Yes
Self-confidence (HelpSelfConfid)	Entering Student Survey	19j. To be a successful student I will need help with self-confidence. Respondents select Yes or No.	0 = No 1 = Yes
Concerns with coursework (CourseworkConcerns)	Entering Student Survey	20a. How concerned are you with your ability to keep up with coursework? Respondents select (1) Very Concerned, (2) Somewhat Concerned, or (3) Not Concerned.	1 = Not concerned 2 = Somewhat concerned 3 = Very concerned

Table 6. Continued

Concerns with making friends (FriendsConcerns)	Entering Student Survey	20d. How concerned are you with making new friends? Respondents select (1) Very Concerned, (2) Somewhat Concerned, or (3) Not Concerned.	1 = Not concerned 2 = Somewhat concerned 3 = Very concerned
Importance of personal counseling services (ImprtncCounseling)	Entering Student Survey	18r. When you think about attending the university, how important are personal counseling services to you? Respondents select (1) Essential, (2) Very Important, (3) Moderately Important, (4) Slightly Important, or (5) Not at all Important.	1 = Not at all important 2 = Slightly important 3 = Moderately important 4 = Very important 5 = Essential

This did not prove to be a significant issue, however, for a number of reasons that are discussed below. The original sample of all first-year domestic students who completed the Entering Student Survey included 8,389 students. There were no missing values for any observations on the dependent variable and many of the independent variables that were provided by the institution (e.g., gender, amount of Pell Grant received, type of high school attended, etc.) included observations for all 8,389 students in the original sample.

As expected when working with self-reported data, some of the independent variables from the institution's Entering Student Survey had missing values. The percentage of missing values on any one independent variable ranged from 0 to 1.9% for 49 of the 52 independent variables included in this study and for the remaining three independent variables this range was from 2.0 to 2.5%. Furthermore, of all students who were missing at least one independent variable, more than two-thirds (70.2%) were missing an observation for only one independent variable. In summary, with zero missing

values on the dependent variable and the percentage of missing values on any single independent variables ranging from zero to no more than 2.5%, the extent of missing values in the study was not substantial.

To explore the missing data mechanism, a chi-square analysis was employed to identify any potential relationships or nonrandom patterns between the probability of missing data on any single independent variable and the value of the dependent variable. Results showed very little evidence of a pattern of nonrandomness in the missing data. In fact, the probability of missing data was related to the value of the dependent variable for only two of the 52 independent variables in the study: the importance of personal counseling services ($p = .038$) and participation in clubs ($p = .015$). For these two variables, the percentage of missing cases was only 0.4% and 1.6% respectively. Because each of these two variables constituted only one of a substantial set of measures of a single broad construct in the study – background variables and cultural capital, respectively – any potential risks of nonrandomness would be relatively unimportant for the study.

As a result of these factors, the missing data in this study were considered to be missing at random and listwise deletion was used to address missing data (Allison, 2001). After employing listwise deletion, the final sample size was 7,561 students and was comprised of 3,774 first-year students in fall 2006 and 3,787 first-year students in fall 2007. Although a potential disadvantage of listwise deletion is the threat of larger standard errors due to fewer available observations, this is expected to be minimal because there are such small percentages of missing values for any of the individual independent variables included in the study. Using logistic regression in this study also

provided another positive feature that minimized the potential drawbacks sometimes associated with this method of handling missing data; that is, listwise deletion is very robust with respect to any independent variable violations of data missing at random (Allison, 2001).

Data Analysis Procedures

Data was analyzed using SPSS computer software. The primary purpose of this study was to determine what variables are useful in explaining the enrollment-related behaviors and course selection choices of first-year students. In particular, this study examines what factors help explain whether or not students choose to voluntarily enroll in a college transition course or seminar. With explanation as the intended goal, a regression technique was used for the statistical analysis of the data. Instead of multiple regression, however, logistic regression was used.

Multiple regression is the most widely used statistical technique in the social sciences because it allows for the study of the relationship between a dependent variable and one or more independent variables. Researchers are able to combine the various independent variables for effective explanation of variation in the dependent variable as well as control for each independent variable in potential causal aspects of the analysis. Multiple regression is based on three-dimensional linear models when more than one independent variable is present and works best when the data is on an interval scale although it has also been used extensively with ordinal scales (Aldrich & Nelson, 1984; Allison, 1999).

When a nominal scale is used, however, multiple regression is less useful. Using binary coding for independent variables (e.g., 0 for males and 1 for females) in multiple

regression does not pose problems but it can be detrimental both functionally and statistically when applied to the dependent variable (i.e., 1 for registering or 0 for not registering for a first-year transition seminar). Functionally, a problem with linear regression is that the regression line has the theoretical ability to extend upward to positive infinity and downward to negative infinity. With a dichotomous dependent variable, probabilities have a maximum value of 1 and a minimum value of 0. When the regression line can extend in either direction to infinity, however, predicted values may be found that exceed 1 or 0 and will have minimal value to the research questions or hypotheses (Aldrich & Nelson, 1984; Allison, 1999; Pampel, 2000).

To effectively analyze the effects of X on Y with a dichotomous dependent variable, it is necessary to transform X to eliminate the floor and ceiling effects. To accomplish this, an adjustment needs to be made to X that will allow for X to have a lesser effect on Y near 1 and 0. This will occur with the transformation of probabilities into logits. For example, the dependent variable has two outcomes, 1 and 0. To complete the logistic transformation, first determine the odds of experiencing the outcome ($P_i/(1-P_i)$) and then take the natural logarithm of the odds. The logged odds, or logit, is calculated $L_i = \ln[P_i/(1-P_i)]$ (Aldrich & Nelson, 1984; Allison, 1999; Menard, 2002; Pampel, 2000).

Probabilities are transformed into odds to remove the floor and ceiling effects. Probabilities can range between 0 and 1 and give the chance of an event happening as a proportion of occurrences and nonoccurrences. Odds, on the other hand, express this as the likelihood of an occurrence relative to a nonoccurrence. Probabilities and odds are similar in that they each have a lower limit of zero but odds, unlike probabilities, do not

have a ceiling and so can take on values greater than 1. By taking the natural logarithm of the odds, logistic regression transforms a nonlinear relationship to a linear relationship that allows for the estimation of parameters indicating the effects of the independent variables on dependent variables. This allows for analyses focused on the relationships between independent and dependent variables for purposes of explanation or prediction (Aldrich & Nelson, 1984; Allison, 1999; Menard, 2002; Pampel, 2000).

In logistic regression the odds will be expressed as an odds ratio, allowing for an interpretation of the parameter estimates in terms of a change in odds of occurrence of the dependent variable for each one-unit change in an independent variable. When the value of the odds ratio is greater than one, the interpretation is that, as the independent variable increases, so do the odds of the occurrence of the dependent variable. Similarly, if the odds ratio is less than one, the odds of the dependent variable occurring decrease as the independent variable increases. The interpretation of particular odds ratios, then, is fairly straightforward. For example, for continuous scale variables a significant odds ratio of 1.095 for students' participation in community service or volunteer work would mean that for each one-unit increase in a student's level of participation, the odds that they will enroll in the college transition seminar would increase by a factor of 1.095. Alternatively, this can be expressed as the odds of enrolling in the seminar would be 9.5 percent higher for each one-unit increase in the student's degree of participation when all other independent variables are held constant. On the other hand, an odds ratio of .854 for students' appreciation of fine arts, music, and literature would indicate that, for each one-unit increase in a student's degree of appreciation, the odds that they will enroll in the college transition seminar would decrease by a factor of .854; this can alternatively be

expressed that the odds of enrolling would be 14.6 percent lower ($1 - .854$) for each one-unit increase in the student's degree of appreciation of fine arts, music, and literature when all other variables are held constant.

For dichotomous, or binary, independent variables (e.g., 1 for first-generation students and 0 for continuing generation students) the interpretation is similar with the exception that a one-unit increase in the independent variable always stands for the difference between the two groups and a one-unit increase in the independent variable represents moving from the group coded 0 to the group coded 1. For instance, a significant odds ratio of 1.092 for first-generation student status would mean that for those students whose parents did not attend college, the odds of enrolling in the college transition seminar would be increased by a factor of 1.092 compared to the odds of continuing generation students enrolling; alternatively, the odds of first-generation students enrolling would be 9.2 percent higher than the odds of continuing generation students holding all other variables constant. On the other hand, an odds ratio of .90 on this same independent variable would mean that, for first-generation students, the odds of enrolling in the college transition seminar would be decreased by a factor of .90 compared to the odds of enrolling for continuing generation students. This could also be expressed that first-generation students have odds of enrolling that are 10 percent lower ($1 - .90$) compared to students whose parents did attend college when all other independent variables are held constant.

Odds ratios are often accompanied by confidence intervals, which are typically set at a 95% interval. The primary concern with the confidence intervals is that the lower and upper limits are either both greater than or less than 1. When both the upper and lower

limits of the confidence interval are greater than 1, the interpretation is that, as the independent variable increases, so do the odds of the dependent variable occurring and there is a high degree of confidence that the observed direction of the relationship for the sample is true in the population. The same holds true when both limits of the confidence interval are below 1. If the confidence interval crosses one, however, the interpretation of the relationship is less clear; that is, it may or may not be in the direction observed (Field, 2009).

Care was taken during the data analysis to detect possible violations of model assumptions, such as those due to multicollinearity. Multicollinearity is present when a correlation exists between independent variables. With multiple regression, multicollinearity can result in perfect collinearity, or each independent variable is a perfect linear combination of all of the other independent variables. That is, if any independent variable took on the role of the dependent variable, R^2 , or the measure of the variance explained by the independent variable, would equal 1. Although rarely present, the existence of perfect collinearity makes it impossible to obtain separate estimates for the independent variables. Less than perfect collinearity is not rare and introduces possible inflation in standard errors but does not bias the estimated coefficients. Tolerance values and variance inflation factors were calculated to assess possible multicollinearity for all models (Allison, 1999; Kutner, Nachtsheim, & Neter, 2004; Menard, 2002).

It was possible for multicollinearity to have been present to some degree in this study in a variety of ways. Students from families with larger levels of financial capital may be able to afford to attend private or more affluent public high schools where they

will be have advantages related to teachers, school counselors, and other resources (Bergerson, 2007; Choy, 2001; Everson & Millsap, 2004; Hossler et al., 1999; McDonough, 1997, 2005; Nunez & Cuccaro-Alamin, 1998; Paulsen, 1990; Paulsen & St. John, 2002; Perna 2005; Tierney & Auerbach, 2005). These factors together may better cultivate the students' human capital and lead to higher ACT-Composite scores. Likewise, these same students may have the resources and opportunities to engage in more school and community extracurricular activities and thus acquire more social and cultural capital (Coleman, 1988; Collier & Morgan, 2008; DiMaggio & Mohr, 1985; Hearn & Holdsworth, 2005; Lamont & Lareau, 1988; Lareau & Weininger, 2003; Pascarella et al., 2004; Perna & Titus, 2005; Tierney & Colyar, 2005; Walpole, 2003). For these reasons, all of the independent variables used in this study were assessed for multicollinearity using SPSS, but no evidence of any substantial multicollinearity was found.

Entering Blocks of Variables

Using logistic regression, independent variables were entered in five distinct blocks, one each for background characteristics, human capital, financial capital, social capital, and cultural capital independent variables. The background variables were chosen to be entered first because they are the most unique to each individual student and, while many of the variables and their categories are interrelated (e.g., first-generation student status is related to financial capital and socioeconomic status which can influence cultural, social, and human capital), background variables are both directly affected by family habitus and yet are the most likely to be influenced or changed by the efforts of individual students themselves.

As previously discussed, gender, locus of control, and other academic-related skills guide individual students' beliefs regarding expectations and attainment as well as positively or negatively impacting self-esteem, self-confidence, and the development of an internal or external locus of control. The topics of a first-year transition seminar are often designed to build or enhance an internal locus of control and this, combined with each student's preconceived notions on the value or necessity of a "self-help" course along with how each gender responds to parental advice about enrolling, may all have an effect on explaining enrollment behavior in ways distinct from well established measures of human, financial, social, and cultural capital.

The forms of capital were entered with human capital first followed by financial, social, and cultural capital. Human capital was selected first because, after the background variables, these independent variables were determined to be the most individual to each student. Although students may not be able to control the quality or location of the high school they attend, they can assert control over factors that influence the amount of human capital that may be obtained in high school. Independent variables such as the amount of mathematics or sciences courses taken or the amount of time spent studying are not necessarily dependent on the levels of social or cultural capital a student or family possesses.

Moving from financial capital, the third block of independent variables, to social and then cultural capital brings an inexact shift in the influence of habitus and the autonomy of students in their choices. Although it is an important factor, financial capital does not have to be a limiting factor for enrolling in a college or university. Students cannot control if they are first-generation students – a financial capital-related variable –

but they can take on the responsibility of securing scholarships and financial aid and determining if and how much they will work in college.

The primary social capital variable, importance of family advice, will certainly be affected by parent's level of education as it relates to college-going and course enrollment behaviors. Whether or not parents support or encourage these actions will be impacted by habitus, which will be impacted by the parent's own background and experiences. First-generation students may act independently when they are away from home and actively engage siblings, relatives, friends, or school counselors and teachers for advice about college. Cultural capital variables, which may play the most significant role in explaining course enrollment behavior, may also be the most directly impacted by all of the above. Students' participation in school or community activities will be directly impacted by how important the students and their families view participating in these activities and whether or not the students have obligations that are given a higher priority at home – such as working to help support the family – than joining a club or team.

For a complete list of independent variables measuring each construct, refer to Tables 2 – 6.

Individual regression coefficients and the goodness-of-fit of the overall course selection model were assessed by employing several widely used approaches recommended in the literature on logistic regression (DeMaris, 2004; Long, 1997; Menard, 2002). The statistical significance of each logistic regression coefficient estimated was assessed using the Wald chi-square test and statistical significance was reported for each independent variable's relationship to the dependent variable.

The other statistical tests focused on assessing the goodness of fit of the model.

Estimation in logistic regression is based on maximizing the likelihood function, which effectively means minimizing the -2 log likelihood statistic (-2LL) where the -2LL statistic represents deviance or dispersion and is an indicator of the lack of fit in a model. Researchers seek to minimize a model's lack of fit by including appropriate explanatory variables in a logistic regression equation or model containing only an intercept. Specifically, the difference in the -2LL statistic between the model with an intercept only and a model that includes explanatory variables is distributed as a chi-square statistic. This is typically referred to as the model chi-square statistic because it provides a test of the null hypothesis that the regression coefficients on all explanatory variables in the model are jointly equal to zero; that is, the independent variables have no significant effect on the outcome or dependent variable. A statistically significant model chi-square test means that the explanatory variables included in the model result in a significant reduction in model deviance and a significant improvement in model fit (i.e., -2LL).

The -2LL statistics for the intercept-only and the final model, as well as their differences, was calculated for the overall model and the corresponding chi-square test was conducted to assess goodness-of-fit. The likelihood ratio index (R^2_L) – viewed in the literature as somewhat parallel to the R^2 in ordinary least squares regression – was also used to assess goodness of fit. The likelihood ratio index represents the proportional reduction in the -2LL statistic when independent variables are added to the model and is calculated as the difference in the -2LL statistic between the model with only an intercept and a model filled with explanatory variables; this difference is expressed as a percentage of the -2LL statistic between the model with only an intercept. The likelihood ratio index was computed for each stage of the model as each new block of variables was added and

for the final overall model. In addition, as each new block of variables was entered, the difference between the -2LL statistic for the previous model and the model with the new block added was calculated in order to use a chi-square test to assess whether the variables in the new block, in combination, improved the goodness-of-fit of the model.

Limitations and Delimitations

This study had several limitations and delimitations. It was conducted at a public, comprehensive, Research I university in the Midwest, making it difficult to generalize the findings to other colleges, universities, and groups of students. Admission requirements are guided by the university's charter and state government. The institution is classified as moderately selective and, as a result, only first-year students who fall below a certain admission index score are not admitted. Over the past ten years (i.e., 2001-2002 to 2010-2011), the average ACT-Composite score and high school grade point average of the entering class has been 24.9 and 3.55, respectively (Office of the Registrar, 2010).

The literature review revealed high school class rank to be a variable that could predict first year academic success as well as standardized test scores or high school grade point average (Baron & Norman, 1992; Hood, 1992; Micceri, 2001; Ting, 1997). Because high schools, particularly larger high schools, are moving away from assigning class ranks (E. Rinderspacher, personal communication, December 4, 2008), this variable was not included.

Caution must be exercised when interpreting the data from the institution's Entering Student Survey. Students self-reported their responses and this may affect or bias the findings. When survey respondents are given the opportunity to self-report, differences in observed behavior and self-reported behavior have been found if the acts

were difficult to observe, occurred with low frequency, or were undesirable. In other words, individuals may be willing to increase self-reportings of desirable acts and decrease self-reportings of undesirable acts. These findings suggest there may be motivational concerns and informational factors biasing self-reports in any given situation, which is common when using data derived from self-reports (Gosling et al., 1998; Sappington et al., 2002).

Related to the issues involving bias and self-reporting is bias and satisficing behavior. Individuals engage in satisficing behavior when the primary goal becomes finishing the survey quickly. Responses tend to be superficial and satisficing respondents do not make an effort to understand each answer completely. Rather, they will seek only to understand the question well enough to provide an answer. Examples of satisficing include selecting “do not know,” “no opinion,” or the same answer for each question. Respondents may also stop answering questions when they feel they have provided an appropriate number of responses (Dillman, 2000; Groves et al., 2004).

It is noteworthy that this study does not include race or choice of major as independent variables. Over the past ten years this Midwestern Research I university was, on average, 90% white. The annual nonwhite population at this institution is, on an annual basis, approximately 2.4% African American, 3.7% Asian, 2.8% Hispanic, and 0.5% Native American (Office of the Registrar, 2010). Although it is not appropriate to assume that each form of capital studied will operate the same way across each of these subcultures of American society (Lareau & Weininger, 2003), each of these groups – unlike the international student population – has been influenced by American society. The small number of students in each category, however, did not allow for meaningful

variation and analysis by race or ethnicity in the sample. Because 50% or more of first-year students are typically open or do not have a declared academic major (Office of the Registrar, 2010) and so are more likely to be taking courses within each college's general education program or prerequisite courses in their first semester, choice of major was not included.

Most studies of the effectiveness of college transition seminars examine the effect of seminar participation on outcomes such as performance or persistence. However, these studies are subject to selection bias in their estimates of effects (Heckman, 1979). In such studies, students are self-selecting whether or not to enroll in the college transition seminar during their first semester. The presence of self-selection bias would mean that those unknown and unexamined factors that determine students' decisions to take or not take the first-year seminar may themselves be the determinants of the positive effects of seminars on persistence and will, therefore, result in omitted relevant variable – or self-selection – bias. This study is not subject to this particular limitation because it does not study the effects of college transition seminars on other college outcomes. Instead, this study directly estimates the parameters of the course selection model itself, as indicated by the research questions focusing on the variables that lead a student to self-select enrolling in the college transition seminar. It is still possible that some amount of self-selection bias could occur in the present study if, for example, students self-select into certain high school activities that are associated with participating in first-year transition courses or seminars and these variables are not included in the model. Because of the substantial sets of precollege background and high school variables included in this study, however, the possibility of omitted relevant variables that might lead to self-

selection bias is expected to be minimal.

Organization of the Dissertation

The rest of this dissertation is arranged over two chapters. Chapter IV discusses results and the dissertation concludes with Chapter V and a discussion of the results and their implications for theory development, institutional policy and practice, and future research.

CHAPTER IV

RESULTS

This chapter presents the results of the study. The presentation of the findings is consistent with this study's foundation in college choice and course selection theory and focuses on the identification and examination of variables that helped to explain whether or not students voluntarily enrolled in a college transition seminar. This chapter begins with a section detailing the descriptive statistics for the variables included in the model. Next, the chapter provides a conceptual review of the central constructs that play a key role in the course selection theory, followed by an overview of the principle findings from the logistic regression analysis. The chapter continues with a detailed presentation of the results for each block of independent variables (i.e., background variables and each form of capital) and concludes with a brief discussion of the findings.

Descriptive Statistics

Background Variables

Descriptive statistics for the dependent variable and each background independent variable can be found in Table 7. It should be noted that the average age of students in both first-time, first-year student cohorts was 18.1. Because of its limited variation across the sample, age was not an independent variable in this study.

At the university where this study took place, slightly less than one-quarter of the entering students enrolled in the college transition seminar (23.7%). Although this number is low, particularly in light of the literature reviewing the positive benefits associated with a first-year experience course, it is not surprising. To facilitate the intended outcomes of the seminar, enrollments in individual sections of this course

Table 7. Descriptive Statistics: Background Variables

Variable	Frequency	Percent	Mean	SD	Range (low, high)
Enrolled in college transition seminar			-	-	-
Enrolled	1,794	23.7			
Did not enroll	5,767	76.3			
Gender			-	-	-
Male	3,394	44.9			
Female	4,167	55.1			
Study skills			-	-	-
Do not need help	3,892	51.5			
Will need help	3,669	48.5			
Time management			-	-	-
Do not need help	4,513	59.7			
Will need help	3,048	40.3			
Money management			-	-	-
Do not need help	5,878	77.7			
Will need help	1,683	22.3			
Locating resources			-	-	-
Do not need help	4,821	63.8			
Will need help	2,740	36.2			
Self-confidence			-	-	-
Do not need help	6,440	85.2			
Will need help	1,121	14.8			
Concerns with coursework			2.21	.686	1, 3
Not concerned	1,163	15.4			
Somewhat concerned	3,680	48.7			
Very concerned	2,718	35.9			
Concerns with making friends			1.86	.715	1, 3
Not concerned	2,545	33.7			
Somewhat concerned	3,548	46.9			
Very concerned	1,468	19.4			
Importance of personal counseling services			3.01	1.127	1, 5
Not at all important	828	11.0			
Slightly important	1,487	19.7			
Moderately important	2,836	37.5			
Very important	1,611	21.3			
Essential	799	10.6			

during the two years of this study ranged from 14 to 19 students. If enrolling students were spread out equally between each cohort, resources of 60-65 classrooms and instructors would have been required each year. This may have created an unintended strain on instructional and facility resources during years the university was experiencing, at that time, record numbers of first-year students (Office of the Registrar, 2010).

The sample was 55% female and this ratio of female to male students has been consistent at this university for more than a decade (Office of the Registrar, 2010). It is interesting that substantial percentages of students indicated that they expected they would need help with their study skills (48.5%), time management (40.3%), and locating campus resources (36.2%), especially because these are topics that are covered in the seminar. Similarly, the majority of first-year students in the sample reported concerns with coursework (48.7% were somewhat concerned and 35.9% were very concerned) and making friends; 46.9% reported somewhat concerned and 19.4% very concerned. Each of these topics is also addressed in an academic and social transition course. Fewer students self-reported that they would need help with money management (22.3%) or their self-confidence (14.8%). More than two-thirds of the sample (69.4%) believed the importance of personal counseling services was moderately important (37.5%), very important (21.3%) or essential (10.6%).

Human Capital Variables

Human capital can best be described as the combination of knowledge, skills, abilities, attitudes, and talents each individual possesses. In this study, human capital was assessed using academic preparation (e.g., high school curriculum) and academic achievement (i.e., ACT-Composite scores and high school grade point averages). Table 8

reviews the descriptive statistics for each human capital independent variable.

The average ACT-Composite score (24.9) and high school grade point average (3.57) were comparable to the ten-year average for both measures (24.9 and 3.55, respectively) at this university. Very few students failed to meet the high school unit (i.e., admission) requirements in each curricular area, indicating they followed a college preparatory curriculum. The percentage not meeting the university's high school unit requirements in each area was only 3.2% in English, 1.1% in foreign language, 5.9% in natural sciences, 1.8% in social studies, and 1.3% in mathematics.

What was surprising was the small number of students earning credit through advanced placement or other exams. Social studies (12.3%) had the highest percentage of students earning credit followed by mathematics (6.7%), natural sciences (5.9%), and English (5.0%). The number of first-year students who took honors or advanced placement courses in high school is most likely higher than these percentages. It is not possible, however, to know how many students completed these courses but did not take the exams or did not score high enough to earn credit compared to those students who did take the exams and earned college credit.

Financial Capital Variables

Financial capital is a measure of a family's income or wealth and was measured by examining independent variables such as parent's level of education (i.e., first-generation student status) and whether or not students received a Pell Grant. The descriptive statistics for each financial capital independent variable are displayed in Table 9.

The vast majority of students (91.5%) were continuing generation students

Table 8. Descriptive Statistics: Human Capital Variables

Variable	Frequency	Percent	Mean	SD	Range (low, high)
ACT-Composite score			24.9	3.527	12, 36
High school grade point average			3.57	.379	2.13, 7.93
English preparation in high school			-	-	-
Did not meet HSUR	239	3.2			
Met HSUR	4,657	61.6			
Met HSUR and > 4 years of English	2,665	35.2			
Foreign language preparation in high school			-	-	-
Did not meet HSUR	86	1.1			
Met HSUR but < 4 years of foreign language	2,887	38.2			
Met HSUR and \geq 4 years of foreign language	4,588	60.7			
Natural sciences preparation in high school			-	-	-
Did not meet HSUR	449	5.9			
Met HSUR but < 4 years of natural sciences	4,591	60.7			
Met HSUR and \geq 4 years of natural sciences	2,521	33.3			
Social studies preparation in high school			-	-	-
Did not meet HSUR	135	1.8			
Met HSUR	4,153	54.9			
Met HSUR and \geq 4 years of social studies	3,273	43.3			
Mathematics preparation in high school			-	-	-
Did not meet HSUR	99	1.3			
Met HSUR but < 4 years of mathematics	1,513	20.0			
Met HSUR and \geq 4 years of mathematics	5,949	78.7			
Credit by exam earned in English			-	-	-
No credit	7,182	95.0			
Earned credit	379	5.0			

Table 8. Continued

Credit by exam earned in natural sciences			-	-	-
No credit	7,117	94.1			
Earned credit	444	5.9			
Credit by exam earned in social studies			-	-	-
No credit	6,629	87.7			
Earned credit	932	12.3			
Credit by exam earned in mathematics			-	-	-
No credit	7,057	93.3			
Earned credit	504	6.7			

(defined in this study as having at least one parent attend some college) and, following suit, only 13.7% of the students entering in fall 2006 or fall 2007 received financial aid in the form of a Pell Grant at an average amount of \$2,618 (the percentage of students receiving a Pell Grant was not reported in Table 9). More than eighty percent (83.5%) reported the importance of financial aid was at least moderately important in their college search and almost 85% said cost was somewhat important (51.6%) or very important (31.6) in their college choice. Concerns with whether or not they would be able to afford to continue attending this university were more spread out: 38.3% were not concerned, 33.2% were somewhat concerned, and 28.6 were very concerned. Given each of these measures, it was surprising that almost half of the first-year students (46.7%) did not plan to work and only 3.3% planned to work more than part-time (i.e., more than twenty hours per week); an even 50% reported they would be working between 1 and 20 hours per week during their first semester on campus.

Social Capital Variables

Social capital allows for the passing of norms, social controls, trust, and authority

Table 9. Descriptive Statistics: Financial Capital Variables

Variable	Frequency	Percent	Mean	SD	Range (low, high)
First-generation student			-	-	-
Continuing generation student	6,916	91.5			
First-generation student	645	8.5			
Amount of Pell Grant (in thousands)			2,618	1,328	184, 4,310
Importance of financial aid in college search			3.76	1.254	1, 5
Not at all important	585	7.7			
Slightly important	666	8.8			
Moderately important	1,558	20.6			
Very important	1,918	25.4			
Essential	2,834	37.5			
Importance of cost in college choice			2.15	.680	1, 3
Not important	1,271	16.8			
Somewhat important	3,901	51.6			
Very important	2,389	31.6			
Concerns with affordability			1.90	.812	1, 3
Not concerned	2,893	38.3			
Somewhat concerned	2,507	33.2			
Very concerned	2,161	28.6			
Amount plans to work			1.57	.558	1, 3
0 hours per week	3,531	46.7			
1-20 hours per week	3,781	50.0			
21+ hours per week	249	3.3			

through individual or family membership in social groups. Each of these components is typically representative of the dominant social group and must be understood to optimize success and provide access to imitational resources and support. The measures of social capital, such as the importance of family advice in college choice or the type of high school attended, included in this study are presented in Table 10. True to its status as the best indicator of social capital, parental or family encouragement or advice was important to more than 80% of the sample, specifically it was somewhat important to 51.4% and

Table 10. Descriptive Statistics: Social Capital Variables

Variable	Frequency	Percent	Mean	SD	Range (low, high)
Importance of family advice in college choice			2.13	.684	1, 3
Not important	1,328	17.6			
Somewhat important	3,890	51.4			
Very important	2,343	31.0			
Importance of school advice in college choice			1.83	.693	1, 3
Not important	2,562	33.9			
Somewhat important	3,711	49.1			
Very important	1,288	17.0			
Amount of time spent speaking to teachers			-	-	-
0 hours per week	33	0.4			
1-6 hours per week	1,049	13.9			
7 or more hours per week	6,479	85.7			
Importance of location in college choice			2.38	.650	1, 3
Not important	705	9.3			
Somewhat important	3,263	43.2			
Very important	3,593	47.5			
Importance of academic reputation in college choice			2.61	.546	1, 3
Not important	225	3.0			
Somewhat important	2,531	33.5			
Very important	4,805	63.5			
High school type			-	-	-
Private	652	8.6			
Public	6,909	91.4			

very important to 31.0%. The importance placed on advice from school counselors and teachers was interesting in light of the amount of time students reported speaking to teachers outside of class. One-third of the students in this sample found advice from school personnel not important in their college choice, yet 85.7% of the students spent more than seven hours per week speaking with teachers outside of class. Location and academic reputation were considered to be either somewhat important (43.2% and 33.5%,

respectively) or very important (47.5% and 63.5%) by the sample. The great majority of students, 91.4%, attended public high schools.

Cultural Capital Variables

The final block of independent variables measured cultural capital. This form of capital develops in each family unit by their actions and is usually thought of in terms of symbolic representations of wealth. Cultural capital acts to sustain the upper- and middle-classes and, when it is passed along generationally, allows later generations to continue defining and sustaining class status. Table 11 lists the descriptive statistics for the cultural capital independent variables used in this study.

The most common measure of cultural capital in this type of study is having knowledge of fine arts or classical music. This is captured with the independent variable measuring the ability to appreciate fine arts, music, and literature. Over 90% of the students surveyed reported their ability to appreciate fine arts, music, and literature was average (25.9%), above average (28.7%) or excellent (38.3%). Degree aspirations was tilted heavily in favor of earning a four year degree (31.9%) or a graduate or professional degree (59.3%). Slightly more than one half of the sample (52.2%) was not concerned with the value of going to college.

Participation in extracurricular activities closely resembled an all-or-nothing approach. Over 90% of students reported some level of involvement with community service or volunteer work and two-thirds (68.1%) reported at least slight involvement in varsity sports. After these two activities, however, it was the nonparticipation rates that included the majority of the students. From highest level of nonparticipation to lowest, these independent variables were: racial or ethnic organizations (89.5%), cheerleading,

Table 11. Descriptive Statistics: Cultural Capital Variables

Variable	Frequency	Percent	Mean	SD	Range (low, high)
Degree aspirations			-	-	-
No goal, transfer, or < 4 year degree	663	8.8			
4 year degree	2,415	31.9			
Graduate or professional degree	4,483	59.3			
Concerns with value of going to college			1.70	.805	1, 3
Not concerned	3,944	52.2			
Somewhat concerned	1,963	26.0			
Very concerned	1,654	21.9			
Ability to appreciate fine arts, music, and literature			3.97	.983	1, 5
Poor	59	0.8			
Below average	480	6.3			
Average	1,957	25.9			
Above average	2,170	28.7			
Excellent	2,895	38.3			
Involved in community service/volunteer work			2.69	.883	1, 4
Not involved	676	8.9			
Slightly involved	2,478	32.8			
Moderately involved	2,950	39.0			
Very involved	1,457	19.3			
Involved in academic clubs			2.04	1.024	1, 4
Not involved	3,001	39.7			
Slightly involved	2,112	27.9			
Moderately involved	1,620	21.4			
Very involved	828	11.0			
Involved in interest groups			1.64	.908	1, 4
Not involved	4,513	59.7			
Slightly involved	1,690	22.4			
Moderately involved	912	12.1			
Very involved	446	5.9			
Involved in special interest organizations			1.43	.862	1, 4
Not involved	5,714	75.6			
Slightly involved	884	11.7			
Moderately involved	503	6.7			
Very involved	460	6.1			

Table 11. Continued

Involved in political groups			1.31	.688	1, 4
Not involved	5,990	79.2			
Slightly involved	975	12.9			
Moderately involved	404	5.3			
Very involved	192	2.5			
Involved in racial or ethnic organizations			1.16	.516	1, 4
Not involved	6,770	89.5			
Slightly involved	490	6.5			
Moderately involved	199	2.6			
Very involved	102	1.3			
Involved in publications			1.60	1.028	1, 4
Not involved	5,241	69.3			
Slightly involved	984	13.0			
Moderately involved	462	6.1			
Very involved	874	11.6			
Involved in varsity sports			2.78	1.332	1, 4
Not involved	2,414	31.9			
Slightly involved	478	6.3			
Moderately involved	1,018	13.5			
Very involved	3,651	48.3			
Involved in cheerleading/dance team/poms			1.43	.994	1, 4
Not involved	6,260	82.8			
Slightly involved	250	3.3			
Moderately involved	170	2.2			
Very involved	881	11.7			

dance team, or poms (82.8%), political groups (79.2%), special interest organizations (75.6%), publications (69.3%), interest groups (59.7%), and academic clubs (39.7%). The activity with the highest level of nonparticipation, involvement in racial or ethnic organizations, may primarily be a reflection of the homogeneity of the students in each cohort.

Overview of Findings

Review of Course Selection Theory

This study was undertaken to try and explain why students decide whether or not

to enroll in a college transition course or seminar. To do this, the student choice construct was used because it involves a wide range and extended sequence of college-related decisions, including decisions related to whether or not to take a particular course. The value of using the student choice construct and college choice models to examine student course selection behavior is that they include sociological and cultural theories in addition to traditional human capital and status-attainment models of college choice. These constructs influence, in various ways, each of the many types of college-going resources and college-related decisions that students must make, including which courses to enroll in. Additionally, the student choice construct approach allows for the influence of diverse backgrounds, family backgrounds, and environmental variables in individual student's college-related and course selection decisions (Perna, 2006; Salisbury et al., 2009; St. John et al., 2001).

The creation of a theoretical framework that included sociological and cultural theories (e.g., Perna, 2006) has enabled researchers to emphasize the role played by habitus, a social class based phenomenon, and the ways various forms of capital (e.g., social or cultural) may exist and be acquired in the process of choosing whether or not and where to go to college. There is, however, increased usage of these socio-cultural factors, as well as economic and sociological factors, in the literature and research involving both students' college choice and the curricular and other decisions they may make after enrolling (McDonough, 1997; Paulsen, 1990; Salisbury et al., 2009).

The underlying factor connecting each construct in the course selection model is habitus, or the beliefs, value systems, and boundaries that are first learned in our early home and school settings, are internalized throughout our lives, and influence the

opportunities we believe to be available and appropriate to pursue. It also allows for the background variables (i.e., gender, locus of control) and each form of capital to work together synergistically or antagonistically. For example, students with higher levels of academic achievement may be good prospective college students, but if their habitus leads them to believe that choices after high school graduation include immediate employment or joining the military they may not pursue a college education (Dumais, 2002; Paulsen & St. John, 2002; Perna & Titus, 2005).

Human capital is the collection of knowledge, skills, abilities, attitudes, and talents each individual possessed that can be utilized to increase their potential to be productive. Typically, human capital is assessed through measures of academic achievement or preparation. Although often used in research on first-year student success and retention (Di Stefano et al., 2005; Muraskin, 1998; Murtaugh et al., 1999), there has been very little exploration of how human capital impacts first-year students' enrollment decisions. For this reason, the influence human capital has on students' voluntary decisions to enroll in a first-year transition course or seminar was a focus of this study; see Table 2 in Chapter III for a complete list of variables measuring human capital.

A family's income or wealth is a measure of their financial capital. Financial capital, in turn, is a determinant of a family's social class, community, and school environments. All of these factors can impact first-year academic achievement. Financial capital, or factors related to socioeconomic status, has often been an independent variable in studies of academic success, retention, and first-year seminar outcomes, but there has been little attention paid to how financial capital impacts first-year students' course selection decisions. Because of this, the impact financial capital may have on students'

voluntary choices to enroll in a first-year transition course or seminar was a focus of this study; see Table 3 in Chapter III for a complete list of variables measuring financial capital (Choy, 2001; Lohfink & Paulsen, 2005; Pascarella et al., 2004; Terenzini et al., 1996).

Social capital is most often displayed through social groups and affects college-going resources and college-related decisions primarily through parental involvement or, more specifically, parental encouragement. Time and again, this encouragement, regardless of socioeconomic status, has been found to be the single most significant factor effecting college-going aspirations. Parental encouragement is demonstrated through familial postsecondary expectations, encouraging a college preparatory curriculum, or saving for college (Hossler et al., 1989; Hossler et al., 1999; Perna & Titus, 2005). Previous higher education studies have included social capital in research related to college-going aspirations, student success, and retention and social capital has been positively associated with academic success in college and outcomes of participating in first-year transition programs (Bergerson, 2007; Choy, 2001; McDonough, 1997; Perna & Titus, 2005; Tierney & Auerbach, 2005). Regarding the choice to voluntarily enroll in a college transition seminar, however, the influence of social capital has not been explored as a way to explain this behavior. As a result, social capital independent variables were a focus of this study; see Table 4 in Chapter III for a complete list of variables measuring social capital.

The final set of capital included in this study was cultural capital, or the representation of symbolic wealth that both defines the dominant classes and is passed on to succeeding generations to sustain their place in society (Paulsen & St. John, 2002;

Perna & Titus, 2005). Cultural capital is developed through things like trips to the theatre, concerts, or museums and results in familiarity with and access to such things as cultural knowledge and values, educational credentials, and school-related information of the upper- and middle classes. The ability to accumulate cultural capital is not taught in schools, but it has been institutionalized and is reproduced and distributed through the schools. The end result is that an educational system that rewards cultural capital penalizes students – such as those students from lower socioeconomic classes – who do not possess high levels. The ability to appreciate the arts, amount of time spent socializing with peers, and levels of involvement in extracurricular activities are all associated with cultural capital (Bourdieu, 1977; Dumais, 2002; Perna & Titus, 2005). Cultural capital constructs have been found to be positively linked to academic achievement, persistence, the effects of completing a first-year transition seminar, and have quite often been a focus in studies of college-going aspirations (Corwin et al., 2005; Hearn & Holdsworth, 2005; Hossler et al., 1989; Perna & Titus, 2005; Williford et al., 2001). Whether or not cultural capital can assist in explaining first-year students' choice to voluntarily enroll in a college transition course or seminar, however, has not been studied and so was included in this research; see Table 5 in Chapter III for a complete list of variables measuring cultural capital.

Gender, measures of locus of control, and measures of other academic-related skills formed the background variables included in this study. These variables are often associated with a form of capital and are linked with students' individual and family habitus. When these independent variables work together, and in conjunction with one or more forms of capital and habitus, they may affect students' beliefs about what is or is

not attainable as well as impacting their sense of locus of control (Mansfield & Warwick, 2006; Pascarella et al., 1996; Salisbury et al., 2010). Regarding gender, differences have been found in parent's college-saving habits (i.e., for sons versus daughters), the college-specific characteristics important to men and women during their college searches, and the importance placed on the advice from parents, family, friends, and school personnel in choosing a college (Bouse & Hossler, 1991; Galotti & Mark, 1994; Sax, 2008; Shank & Beasley, 1998).

Locus of control, or the extent that individuals are self-directed or believe they have control over their own fate, may also affect first-year students course enrollment decisions. This is particularly true in this study because the outcome is voluntary enrollment in a course designed to assist with the social and academic transitions to college: students with a well-developed internal locus of control or who are self-regulated learners may not feel this course is necessary (Pascarella et al., 1996; Paulsen & Gentry, 1995). This collection of background variables have each been used in studies interested in the decision-making processes related to college and on students' academic success in college (Mansfield & Warwick, 2006; Pascarella et al., 1996; Ryan & Glenn, 2004; Salisbury et al., 2010). They have not, however, been part of a study with the purpose of explaining first-year students' decisions to voluntarily enroll in a college transition seminar. For this reason, gender, locus of control, and other academic-related skills were included in this study; see Table 6 in Chapter III for a complete list of background variables.

Entering Blocks of Variables

As discussed in Chapter III, the block of background variables were entered first

because they are individual for each student and have the ability to be affected the most by habitus and influenced or changed the most by the students themselves. These variables (gender, locus of control, and other academic-related skills) regulate students' beliefs regarding expectations, attainment, and their development of an internal or external locus of control. The topics included in a first-year transition seminar, also discussed in Chapter II, are constructed to develop or enhance an internal-oriented locus of control. Students with a well-developed internal locus of control may not view this type of course as important or necessary and thus be less likely to voluntarily enroll. Gender may play a role in enrollment decisions given differences in each gender's social and cultural expectations during the college search and choice processes. Parental advice, too, affects men and women differently and may affect decisions to enroll in the transition seminar.

Human capital was the first form of capital entered into the model followed by financial, social, and cultural capital. After background variables, human capital independent variables were determined to be the most individual to each student. Students have the ability to control some of the factors that influence the amount of human capital they can accumulate in high school (e.g., taking an advanced mathematics course) even though they cannot always control the type of high school attended (a measure of social capital in this study), or levels of involvement in extracurricular activities (measures of cultural capital in this study).

Financial capital was the third block of variables entered. These variables were entered after human capital because financial need itself does not have to be a limiting factor related to going to college. It was believed that moving from financial to social to

cultural capital was accompanied with a shift in the influence of habitus and the autonomy of students in their choices. For instance, students cannot change some financial capital independent variables (e.g., first-generation student status, types and amounts of financial aid), but they can plan to proactively seek out financial aid or employment opportunities.

Social capital was the fourth set of independent variables added to the course selection model and, of these independent variables, the most important one is the importance of family advice or parental encouragement. Like each of the previous blocks, social capital was impacted by habitus and affects college-going resources and course enrollment behaviors. The acquisition of other forms of capital by students outside of the home, however, may embolden students with limited amounts of social capital and lead them to approach school counselors and teachers for advice about college such as tips for applying or comparing the financial aid packages from each school in their consideration set. This advice, in addition to speaking with teachers outside of class, are other social capital variables included in this study.

The final block of variables entered into the course selection theory were measures of cultural capital and may play the most significant role in explaining course enrollment behaviors. Cultural capital may also have the most interconnections with some of the other factors. For example, whether or not students develop the ability to appreciate fine arts, music, or literature or are able to participate in service, volunteer, or school activities will be partially determined by how important participation is viewed (habitus) and whether or not parental encouragement is received (social capital).

General Findings:
An Overview Across All Steps of the Model

In terms of a model designed to explain the enrollment behavior of first-year students in a college transition seminar, the course selection theory offers a new approach for understanding why students choose to voluntarily enroll in this type of course. Each block of variables contained independent variables that were significant for that specific block, the final model, or both. In all, 17 of the 52 independent variables included were significant in one or more steps, or blocks, of the model. The general findings across all five blocks of the model are displayed in Table 12.

Of the nine background variables, five were significant when they were first entered into the model and three remained significant as each block of capital variables was entered. Of the original significant variables, need help with study skills, need help with locating resources, and concerns with ability to keep up with coursework were significantly and positively related to enrolling in the transition course throughout all blocks, or steps, of the model. Concerns with making friends was significant when only the background variables were entered and the importance of personal counseling services was significant for the model in both Block 1 (background variables) and in Block 3 (financial capital variables).

The results indicate the importance of students being concerned about doing well in college and how this affects whether or not they are likely to enroll in the first-year seminar. For each variable that was significant in the final block of the model, those students expressing an explicit need for help with study skills, need help with locating resources, and concerns with coursework showed greater odds of enrolling in the college transition seminar. Their peers who did not express these same needs and concerns had

Table 12. General Findings Across All Steps of the Course Selection Model

Variables	Block 1 Background Variables	Block 2 Human Capital Variables	Block 3 Financial Capital Variables	Block 4 Social Capital Variables	Block 5 Cultural Capital Variables
Female	1.094	1.039	1.039	1.023	.981
HelpStudy	1.386***	1.263***	1.263***	1.275***	1.246***
HelpTimeMgmt	.972	1.055	1.054	1.048	1.057
HelpMoneyMgmt	1.070	1.064	1.078	1.075	1.092
HelpLocResrcs	1.125*	1.186**	1.183**	1.188**	1.169**
HelpSelfConfid	1.015	.999	.997	.998	1.012
CourseworkConcerns	1.207***	1.130**	1.136**	1.129**	1.117*
FriendsConcerns	.884**	.924	.929	.924	.931
ImprtnceCounseling	1.089***	1.049	1.054*	1.036	1.041
ACT		.931***	.934***	.936***	.950***
HSGPA		1.022	1.028	1.039	.970
EnglishPrep					
Did not meet HSUR		.920	.908	.910	.920
Met HSUR		1.017	1.018	1.018	1.008
FLPrep					
Did not meet HSUR		.998	.983	.993	1.052
Met HSUR but < 4 yrs		.980	.976	.977	.978
NSPrep					
Did not meet HSUR		1.057	1.061	1.063	1.078
Met HSUR but < 4 yrs		1.184**	1.182**	1.176**	1.185**
SS Prep					
Did not meet HSUR		.937	.944	.948	.945
Met HSUR		1.024	1.027	1.019	1.024
MathPrep					
Did not meet HSUR		1.390	1.378	1.402	1.389
Met HSUR but < 4 yrs math		1.093	1.093	1.101	1.156*
ExamEnglish		.643*	.647*	.650*	.704
ExamNS		.773	.778	.786	.788

*p < .05. **p < .01. *** p < .001.

Table 12. Continued

ExamSS	.867	.875	.888	.914
ExamMath	.976	.973	.973	.934
FGS		1.100	1.105	1.092
AmtPellGrant		1.062*	1.061*	1.058*
ImprtnceFinAidSearch		1.007	1.006	1.010
ImprtnceCost		.919	.907*	.908*
AffordConcerns		.980	.984	.985
HrsWillWork				
Work 1-20 hrs/wk		.926	.932	.949
Work 21+ hrs/wk		.955	.970	.983
ImprtnceFamilyAdvice			1.109*	1.127*
ImprtnceSchoolAdvice			1.080	1.067
SpeakTeachers				
1-6 hrs/wk			.700	.666
7+ hrs/wk			.658	.624
ImprtnceLocation			.991	.989
ImprtnceAcadRep			1.008	1.024
PublicHS			.907	.977
DegreeAspirations				
4 year degree				.958
Graduate/Professional Degree				.925
ValueConcerns				1.004
ApprecArtMusLit				.854***
Service				1.095**
Clubs				.997
Groups				.981
Orgs				.999
Politics				.901*

*p < .05. **p < .01. *** p < .001.

Table 12. Continued

RacEthnOrgs	1.146*
Pubs	1.034
Varsity	1.023
CDP	1.105***

*p < .05. **p < .01. *** p < .001.

lower odds of enrolling. The results emphasize the importance of including social adjustment topics in a first-year seminar given the significant relations to enrollment shown in earlier blocks of the model where students expressed concerns with making friends and the importance of personal counseling services.

Generally, findings for the human capital independent variables followed a pattern that was expected from the course selection theory. ACT-Composite score, one of the most powerful explanatory variables for enrollment behavior, was significantly and negatively related to enrollment in each block of the model in which it was entered. Students scoring higher on the ACT had lower odds of enrolling in the transition seminar, supporting the view that students with higher levels of academic preparation or achievement may believe this course is unnecessary. These students may not receive parental encouragement to enroll in the seminar for this same reason.

Findings for measures of high school curriculum variables, however, reveal a somewhat more complex picture. For example, one of the measures for natural sciences preparation was meeting the admission requirement but taking less than four years of science in high school. This variable was significant and positively related to enrolling in the transition seminar in each block of the model it was entered. Meeting the mathematics requirement, but taking less than four years of mathematics, was significant in the final

model. Interestingly, these students had greater odds of voluntarily enrolling in the seminar than their more prepared peers who did take four years of each subject. These students, realizing they met the admission requirements but were not as prepared as some of their peers, chose to enroll in the college transition course.

Examining the independent variables for financial capital reveals two interesting findings relative to the course selection theory. Of these variables, receiving a Pell Grant was the one that was significant throughout each of the final three blocks of the model. This variable is indicative of students from lower socioeconomic status homes, and those receiving Pell Grants (i.e., with lower socioeconomic status) had greater odds of voluntarily enrolling in the seminar. The importance of cost in choosing a college had a significant effect on enrollment in the final block of the model. Students who placed greater value on the importance of cost considerations in making their college choices had lower odds of voluntary enrollment in the seminar. This is not surprising given that a greater awareness of, and placing greater value on, the importance of cost in the college choice stage is more often associated with continuing generation students from families with higher levels of socioeconomic status. In addition to whether or not cost is a limiting factor for these students, this is particularly true related to such topics as applying for scholarships or comparing institutional aid packages to obtain the best deal.

From the block of social capital variables, only one independent variable was statistically significant. Advice from parents, family and friends was significant in the last two blocks of the model. The greater the importance that students placed on this advice, the greater was their odds of enrolling in the first-year seminar. This was expected and is consistent with the course selection theory. Among continuing generation students, a

greater likelihood to enroll may be the result of parental involvement in course selection decisions because they understand how college works and all of the advantages that accompany this type of course (e.g., earning nongraded credits or credits that may be “free” based on tuition assessments). On the other hand, for first-generation students’ greater enrollment odds may be because parents recognize they *do not* possess a great deal of social capital and encourage enrollment in the transition course to enable their children to be exposed to and accumulate as much social capital as possible early in their college careers.

Several cultural capital variables were significant. One of the most often used measures of cultural capital in higher education research, embodied cultural capital or students’ interest in music or the arts, was significant. In fact, two of the cultural capital variables commonly associated with affluence or advantage – the ability to appreciate fine arts, music, and literature and involvement in political groups – were both significant and negatively related to voluntarily enrolling in a course that teaches students how to transition to and be successful in college. On the other hand, the cultural capital variables of engagement in community service or volunteering, race or ethnic group membership, and involvement in cheerleading, dance team, or poms were all significantly and positively related to voluntary enrollment in the college transition seminar.

Goodness-of-Fit

Goodness-of-fit is assessed by reviewing the log-likelihood (-2LL) ratios throughout the model. As discussed in Chapter III, the -2LL is first calculated with only the constant in the model and acts as a comparison for the rest of the model. A new model -2LL is calculated for each block, or step, in the model and should be smaller if

that block of variables and the model is more accurately explaining the outcome (i.e., choosing to enroll in the transition seminar). How much better each step and model is explaining students' enrollment behavior can be determined by the statistics presented in Table 13. This table shows two different chi-square statistics: one for just the new variables added in each block (or step) and one for the overall model after the new set of variables in each block are added and combined with all the other variables making up the course selection theory.

The block chi-square indicates that, with the exception of financial capital, each block of variables added significantly to the explanatory power of the model. We know from individual coefficient estimates and tests, however, that two of the individual financial capital variables themselves did have significant relationships with the outcome variable.

The model chi-square statistic tells us if the overall model is significantly better at explaining the enrollment behaviors of the first-year students as each block of independent variables was added to the model. The model chi-square statistic for the overall model was significant throughout every step of the model, even for the model when the block of financial capital variables were first entered, indicating that the course selection theory is statistically significant in its ability to explain enrollment-related behaviors of the first-year students in this study (Field, 2009; Garson, 2010; Menard, 2002).

All independent variables in the final model were also assessed for the existence of multicollinearity. Results of the multicollinearity diagnostics based on tolerance values and variance inflation factors revealed no evidence of any problematic multicollinearity.

Table 13. Goodness-of-Fit Statistics Across All Steps of the Course Selection Model

Goodness-of-Fit Statistic	Block 1 Background Variables	Block 2 Human Capital Variables	Block 3 Financial Capital Variables	Block 4 Social Capital Variables	Block 5 Cultural Capital Variables
Intercept only -2LL	8285.538	-	-	-	-
Model -2LL	8185.058	8043.910	8031.655	8014.915	7951.751
Block chi-square	100.480***	141.148***	12.255	16.740*	63.164***
Model chi-square	100.480***	241.628***	253.883***	270.624***	333.787***
Block degrees of freedom	9	16	7	7	13
Model degrees of freedom	9	25	32	39	52

*p < .05. **p < .01. *** p < .001.

Detailed Findings for Each Research Question for the Final Step of the Model

This section of Chapter IV reviews each of the research questions and, using the final model with each block of independent variables included and controlled for, presents the findings explaining the enrollment behavior of first-year students related to a college transition seminar. In the final model, there were 14 significant independent variables and at least one significant independent variable came from each block of the model. Each block and research question is reviewed separately and includes a brief discussion of the significant variables and their odds ratios.

Background Variables

The first block of independent variables entered into the model was the background variables. These were the variables most innate to individual students. Each student has their own unique sense of locus of control and the ability to impact or change their locus of control in ways that are not associated with various forms of capital.

Although first-year students cannot change, for instance, their parent's level of education

or socioeconomic status, they can work to develop or improve an internal locus of control. Results related to such variables help answer the following research question:

What is the effect of individual background characteristics on the decision to voluntarily enroll in a college transition course or seminar?

The background variables found to be significant in the final model were also the variables most closely tied to the academic transition from high school to college. This was not unexpected given Tinto's work on retention (Tinto, 1975). These variables were: need help with study skills, need help with locating resources, and concerns with ability to keep up with coursework. The odds of students enrolling in the first-year transition seminar increased by a factor of 1.246 for students who indicated they would need help with study skills; their odds of enrolling were 24.6% higher than those students who did not believe they would need help with study skills holding all other variables constant. The odds ratio for need help with locating resources was 1.169, indicating students who answered they would need help had odds of enrolling in the college transition seminar that were 16.9% higher than their peers who did not report needing help with locating resources. Unlike these two dichotomous variables, the variable concerns with ability to keep up with coursework was measured on a Likert scale and had an odds ratio that, for each one-unit increase in concern with keeping up with coursework, the odds of enrolling in a transition seminar increased by a factor of 1.117. To put this another way, the odds of voluntary enrollment increased 11.7% as students went from not concerned to somewhat concerned with their ability to keep up with their coursework.

Gender was not related to enrolling in the seminar. The primary variable measuring social transition, concern with making new friends, was not significant beyond

entering the background variables in Block 1. While only three of the nine independent variables in this block were significant in the final model, each of the variables related to locus of control had odds ratios that predicted increased odds of enrolling in the college transition seminar for students with a more external rather than internal locus of control.

Table 14 shows the background variables in the final model with the values for the standardized logistic regression coefficient (b), the standard error of the coefficient (SE), statistical significance of the coefficient (Sig.), and odds ratio, or Exp(b), for the coefficient. The odds ratios for these variables for all five steps of the model's estimation process are available in Table 12.

Human Capital Variables

Human capital variables were entered into the model second because, of the four measures of capital, they are the most inherent to the students themselves. Students who do not exhibit or possess appropriate amounts of human capital in high school may have neither the skills nor the abilities to be successful college students. Students with adequate amounts of human capital, however, tend to have access to opportunities because of their human capital even when their habitus or other capitals do not support going to college (Choy, 2001, 2002; Perna, 2005; Stampen & Cabrera, 1988). Results from human capital variables will help answer the following research question: *What is the effect of human capital on the decision to voluntarily enroll in a college transition course or seminar?*

The ACT-Composite score was a significant explanatory determinant of enrolling in the seminar and is measured on a continuous scale. For each one-unit increase in ACT score, the odds of enrolling in the transition course decreased by a factor of .950, or 5%,

Table 14. Background Variables for the Course Selection Model

Independent Variables	B	SE	Sig.	Exp(b)
Female	-.019	.066	.774	.981
HelpStudy	.220***	.061	.000***	1.246***
HelpTimeMgmt	.056	.064	.382	1.057
HelpMoneyMgmt	.088	.070	.211	1.092
HelpLocResrcs	.157**	.059	.008**	1.169**
HelpSelfConfid	.012	.080	.884	1.012
CourseworkConcerns	.111*	.047	.018*	1.117*
FriendsConcerns	-.071	.044	.106	.931
ImprtnceCounseling	.040	.027	.144	1.041

*p < .05. **p < .01.*** p < .001.

holding all other variables constant. That is, a first-year student with an ACT score of 30 would have 50% lower odds of voluntarily enrolling than a student with a score of 20 (i.e., a decrease of 5% in the odds of enrolling for each one-point increase in ACT score).

In addition to ACT, the other significant variables were natural sciences preparation in high school and mathematics preparation in high school. For both of these independent variables, it was the variable having met but not exceeded the university's high school unit (i.e., admission) requirement that was significant. The finding that mathematics preparation in high school was significant was expected (Adelman, 1999; Choy, 2001; Horn & Nunez, 2000). For students who met the mathematics high school unit requirement but did not exceed it, the odds of enrolling in the first-year seminar increased by a factor of 1.156 compared to students who both met and exceeded the high school unit requirement; the odds that these students would enroll were 15.6% greater, holding all other variables constant. The results were similar for high school natural

sciences preparation. Compared to students who met the high school unit requirement and took four or more years of natural sciences, the odds of students who met the university's admission requirement but took less than four years of natural sciences voluntarily enrolling in the college transition seminar increased by a factor of 1.185 (i.e., the odds were 18.5% higher that they would register for this course). These findings may demonstrate that these students were able to recognize that, even though they were academically prepared enough to be admitted, they may not have been as prepared as some of their peers and so were more willing to voluntarily enroll in the transition seminar.

Table 15 shows the human capital variables in the final model with the values for the standardized logistic regression coefficient (b), the standard error of the coefficient (SE), statistical significance of the coefficient (Sig.), and odds ratio, or $\text{Exp}(b)$, for the coefficient. The odds ratios for these variables for all five steps of the model's estimation process are available in Table 12.

Financial Capital Variables

The variables measuring financial capital were entered after the background and human capital measures because these individual characteristics may create opportunities to pursue higher education to students who may not otherwise have access. Scholarships and federal financial aid such as Pell Grants may make going to college possible, but they may not make all colleges (e.g., private or out-of-state public) possible. Examining the financial capital variables included in the course selection model will help answer the following research question: *What is the effect of financial capital on the decision to voluntarily enroll in a college transition course or seminar?*

Table 15. Human Capital Variables for the Course Selection Model

Independent Variables	b	SE	Sig.	Exp(b)
ACT	-.052***	.010	.000***	.950***
HSGPA	-.030	.091	.741	.970
EnglishPrep				
Did not meet HSUR	-.083	.167	.620	.920
Met HSUR	.008	.061	.895	1.008
FLPrep				
Did not meet HSUR	.051	.257	.844	1.052
Met HSUR but < 4 yrs FL	-.022	.060	.716	.978
NSPrep				
Did not meet HSUR	.075	.127	.553	1.078
Met HSUR but < 4 yrs NS	.170**	.062	.006**	1.185**
SSPrep				
Did not meet HSUR	-.056	.215	.793	.945
Met HSUR	.024	.058	.686	1.024
MathPrep				
Did not meet HSUR	.329	.239	.169	1.389
Met HSUR but < 4 yrs math	.145*	.073	.046*	1.156*
ExamEnglish	-.351	.180	.051	.704
ExamNS	-.238	.157	.129	.788
ExamSS	-.090	.103	.379	.914
ExamMath	-.069	.145	.636	.934

*p < .05. **p < .01.*** p < .001.

Two financial capital variables were significant in the final model: the amount of Pell Grant received and the importance placed on the cost of attending college. For each one-unit increase in the amount of Pell Grant received (i.e., each \$1,000 increase), the odds of students voluntarily enrolling in the college transition seminar increased by a factor of 1.058; the odds of these students enrolling was 5.8% higher, holding all other variables constant. The odds ratio for the importance of cost is .908. For each one-unit increase in the importance placed on the cost of attending, the odds of students enrolling

in the seminar decrease by 9.2%.

Table 16 shows the financial capital variables in the final model with the values for the standardized logistic regression coefficient (b), the standard error of the coefficient (SE), statistical significance of the coefficient (Sig.), and odds ratio, or Exp(b), for the coefficient. The odds ratios for these variables for all five steps of the model's estimation process are available in Table 12.

Table 16. Financial Capital Variables for the Course Selection Model

Independent Variables	B	SE	Sig.	Exp(b)
FGS	.088	.097	.363	1.092
AmtPellGrant	.056*	.028	.043*	1.058*
ImprtnceFinAidSearch	.010	.028	.727	1.010
ImprtnceCost	-.097*	.046	.037*	.908*
AffordConcerns	-.015	.042	.724	.985
HrsWillWork				
Work 1-20 hrs/wk	-.052	.060	.385	.949
Work 21+ hrs/wk	-.017	.160	.916	.983

*p < .05. **p < .01. *** p < .001.

Social Capital Variables

The impact family habitus can have on social and cultural capital may make it difficult to separate the independent variables, or proxies, for each type of capital into two distinct components. In fact, some research – while keeping these constructs theoretically separate – have simultaneously entered the measures of social and cultural capital into the model (Perna, 2000). As a result of the dominant role played by parental and family advice or encouragement (Hossler et al., 1989; Sewell et al., 1969; Sewell & Shah, 1968), social capital was entered into the model before cultural capital. Results

related to social capital variables will help answer the following research question: *What is the effect of social capital on the decision to voluntarily enroll in a college transition course or seminar?*

Analysis of the social capital independent variables was consistent with the expected results from the literature reviewed. Only one of the social capital variables was significant in the final step of the model: the importance placed on advice from parents, relatives or friends ($p = .019$). The odds ratio indicates that for each one-unit increase in the importance students placed on this advice, the odds of students enrolling in the first-year seminar increased by a factor of 1.127. Alternatively expressed, for each one-unit increase in the importance placed on advice from parents, relatives, or friends there was a 12.7% increase in the odds of enrolling, all other variables held constant.

Table 17 shows the social capital variables in the final model with the values for the standardized logistic regression coefficient (b), the standard error of the coefficient (SE), statistical significance of the coefficient (Sig.), and odds ratio, or $\text{Exp}(b)$, for the coefficient. The odds ratios for these variables for all five steps of the model's estimation process are available in Table 12.

Cultural Capital Variables

Cultural capital was the final block of independent variables entered into the course selection model. The importance cultural capital plays in determining students' enrollment behavior cannot be understated. The presence or absence of cultural capital may relate to other forms of capital and the background variables as an individual mechanism or through habitus. Examining the cultural capital variables included in the course selection model will help answer the following research question: *What is the*

Table 17. Social Capital Variables for the Course Selection Model

Independent Variables	B	SE	Sig.	Exp(b)
ImprtnceFamilyAdvice	.119*	.051	.019*	1.127*
ImprtnceSchoolAdvice	.064	.051	.202	1.067
SpeakTeachers				
1-6 hrs/wk	-.407	.398	.307	.666
7+ hrs/wk	-.471	.393	.230	.624
ImprtnceLocation	-.011	.044	.794	.989
ImprtnceAcadRep	.024	.054	.662	1.024
PublicHS	-.023	.101	.816	.977

*p < .05. **p < .01. *** p < .001.

effect of cultural capital on the decision to voluntarily enroll in a college transition course or seminar?

Students' interest in music or the arts is the measure of embodied cultural capital that has been the most often utilized in research (Bourdieu, 1977; Dumais, 2002). Because of this, its statistical significance in the final model was expected. The ability to appreciate fine arts, music, and literature had an odds ratio of .854; this odds ratio is less than one and indicates a negative effect on voluntary enrollment in the seminar. For each one-unit increase in a student's ability to appreciate fine arts, music, and literature, the odds of enrolling in the college transition seminar are expected to decrease by a factor of .854. To state this another way, for each one-unit increase in a student's ability to appreciate fine arts, music, and literature, the odds of enrolling are expected to be decreased by 14.6%, holding all other variables constant.

This finding supports the view that, if students who self-identify themselves on this survey question as having more high-status forms of cultural capital also have a family habitus that encourages and values higher education, they may not feel it is

necessary to voluntarily enroll in a college transition seminar. Likewise, while these students may receive strong parental encouragement to enroll in a college or university, they may not receive strong parental encouragement to register for this course at orientation. This may be particularly true if students or parents do not feel the other students enrolled in the transition seminar will be like them academically, culturally, or socially (Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna & Titus, 2005).

Another potentially high-status cultural capital variable that was significant and had an odds ratio that was less than one, indicating a negative effect on seminar enrollment, was students' involvement in political groups. This variable may follow a route similar to appreciation of fine arts, music, and literature, especially if the students' families have a habitus or belief related to who should and should not be involved in the political process. The odds ratio for involvement in political groups was .901, indicating that for each one-unit increase in a students' involvement in political groups, the odds of enrolling in the college transition seminar are expected to decrease by a factor of .901; alternatively, the odds of enrolling are expected to decrease by 9.9% for each one-unit increase in involvement in political groups, holding all other variables constant.

On the other hand, the cultural capital variables measuring involvement in community service or volunteer work ($p = .010$), racial or ethnic organizations ($p = .012$), and cheerleading, dance team, or poms ($p = .000$), all have a significant odds ratios greater than one, indicating positive effects on the odds of voluntarily enrolling in the transition seminar. The odds ratios indicate that for each one-unit increase in involvement in these extracurricular activities, the odds of voluntarily enrolling in the seminar

increased by 9.5% (community service or volunteer work), 14.6% (racial and ethnic organizations), and 10.5% (cheerleading, dance team, or poms). The question of why the acquisition of these forms of cultural capital increases the odds of enrolling in the seminar is an interesting one. One possible explanation is that in each of these variables, whether it is a service group, racial or ethnic group, or cheerleading, dance team, or poms, students may have acquired the lesson of the value of community or teamwork in successfully completing a project or task and see the first-year transition seminar as a way to begin creating these same types of connections or communities on the college campus.

Table 18 shows the cultural capital variables in the final model with the values for the standardized logistic regression coefficient (b), the standard error of the coefficient (SE), statistical significance of the coefficient (Sig.), and odds ratio, or $\text{Exp}(b)$, for the coefficient. The odds ratios for these variables for all five steps of the model's estimation process are available in Table 12.

Summary of Results

It is possible to use the course selection model to identify those variables that are significant explanatory factors of student behavior regarding voluntary enrollment in a first-year college transition seminar. Explanatory variables from all five blocks of the model were statistically significant and clearly help identify which first-year students are more willing to voluntarily enroll in a first-year transition course. As each block of independent variables was entered, the log-likelihood test for the step was significant with the exception of Block 3 (financial capital, $p = .092$). There were, however, multiple individual explanatory variables that were statistically significant in the financial capital

Table 18. Cultural Capital Variables for the Course Selection Model

Independent Variables	B	SE	Sig.	Exp(b)
DegreeAspirations				
4 year degree	-.043	.106	.688	.958
Graduate/Professional degree	-.078	.102	.441	.925
ValueConcerns	.004	.037	.913	1.004
ApprecArtMusLit	-.158***	.031	.000***	.854***
Service	.091**	.035	.010**	1.095**
Clubs	-.003	.031	.910	.997
Groups	-.019	.035	.594	.981
Orgs	.001	.034	.982	.999
Politics	-.104*	.047	.026*	.901*
RacEthnOrgs	.136*	.054	.012*	1.146*
Pubs	.034	.028	.238	1.034
Varsity	.023	.023	.313	1.023
CDP	.100***	.029	.000***	1.105***

*p < .05. **p < .01. *** p < .001.

variables block; see Table 12 and Table 13.

Independent variables were entered into the model as blocks in the following order: background variables, human capital variables, financial capital variables, social capital variables, and cultural capital variables. The following background variables were found to be significant: need help with study skills, need help locating resources, and concerns with keeping up with coursework; see Table 14 to review all of the background variables. The human capital variables found to be significant were ACT-Composite score, when students met but did not exceed the university's admission requirement in natural sciences, and when students met but did not exceed the university's admission requirement in mathematics; Table 15 contains all of the human capital measures. The

value of a Pell Grant and the importance placed on cost of attending when selecting to attend this university were the significant financial capital measures (Table 16). The importance placed on advice from parents, relatives, or friends in choosing a college was the only social capital variable that was significant (Table 17). Cultural capital had the largest number of significant independent variables and included students' ability to appreciate fine arts, music, and literature, involvement in political groups, involvement in community service or volunteer work, involvement in racial or ethnic organizations, and involvement in cheerleading, dance team, or poms; Table 18 lists the independent variables measuring cultural capital.

Organization of the Dissertation

The final chapter of this dissertation, Chapter V, discusses the results of this study and their implications for theory development, institutional policy and practice, and future research. From prior studies, we know that all students who enroll in a first-year transition seminar will benefit and, as colleges and universities look to this type of experience as a way to increase retention and persistence, administrators must determine whether or not to require all first-year students to enroll in a transition course, what factors encourage students to voluntarily enroll in such seminars, what the seminar experience will consist of (e.g., academic transition issues, social transition issues, or both), and how the institution will develop the physical and monetary resources to offer the intervention. This study, along with future research suggested in Chapter V, will assist higher education administrators in answering these and similar questions.

CHAPTER V

DISCUSSION

This chapter discusses the findings from Chapter IV, including relating them to the literature reviewed in Chapter II, in more detail. It starts with an examination of the results of each research question, beginning with the independent background variables and proceeding to each block of variables as they relate to the four forms of capital. Following this analysis, the chapter concludes with implications for theory, policy, practice, and a discussion of ideas for future research.

General Findings

A consistent pattern in the findings throughout this study was that students demonstrating the characteristics associated with being more advantaged in terms of their college-going resources (i.e., their backgrounds or forms of capital) were less likely to enroll in the first-year transition seminar. On the other hand, students who were more disadvantaged in terms of their college-going resources were more likely to enroll in the college transition seminar. For example, students whose college-going resources consist of higher ACT-Composite scores, a higher self-evaluation of their ability to appreciate fine arts, music, and literature, and fewer concerns about the cost of attendance enroll in the seminar less often than students who receive a Pell Grant, express concerns about keeping up with coursework, belong to a racial or ethnic organization, or participate in extracurricular activities that are not associated with or require high-status cultural capital. This pattern will be elaborated on in more detail as each research question is evaluated and discussed.

Research Question: What Is the Effect of
Individual Background Characteristics On the
Decision To Voluntarily Enroll In a
College Transition Course or Seminar?

The background variables used in this study focused on locus of control, gender, and other academic-related skills associated with academic success in college.

Students with an internal locus of control orientation are more likely to believe they are responsible for what happens to them and what affects their academic success. Alternatively, students with an externally oriented locus of control believe luck, fate, or other people play a larger role in the creation of their academic success or failure. Pascarella et al. (1996) suggested that college students with an internal locus of control will academically outperform their peers with an external locus of control. Lotkowski et al. (2004) found academic self-confidence, along with academic-related skills (e.g., time management and study skills) and academic goals, to be the strongest nonacademic factors in predicting retention or performance. Ryan and Glenn (2004) studied intervention models that were either learning strategies models or academic socialization models and found students who participated in seminars focusing on learning strategies were better able to identify factors they could control and manipulate (e.g., time management or test taking strategies) that could lead to more successful academic performance. Their findings support those of researchers studying students' engagement in self-regulated learning, which is characterized by (a) students' attempts to control their own behavior, motivation, affect, and cognition, (b) setting their own attainable goals, and (c) seeing themselves – and not their parents, teachers, or peers – as controlling their own actions. Students who have not mastered the role of self-regulated learners may be unaware that they can consciously control their actions and strategies related to these

characteristics and learning (Paulsen & Gentry, 1995; Pintrich, 1995; Wolters, 1998).

In this study, it is evident that students who are more advantaged in terms of their college-going resources (e.g., students with an internally oriented locus of control) are less likely to enroll in the transition course and students more disadvantaged in terms of their college-going resources (i.e., with a more external locus of control) are more likely to enroll in the first-year seminar. This pattern is supported in the final model by the three background variables that were significantly and positively related to voluntarily enrolling in the college transition seminar: need help with study skills, need help locating resources, and concerns with ability to keep up with coursework. Higher levels on all three of these variables tend to identify or characterize students who have the disadvantage of possessing a more external locus of control and indicate students who may have less self-confidence in their current ability to use learning strategies that they can manipulate or control when they attempt to improve their study skills by working on time management, note taking, or test taking skills. The findings that students who express needs for various forms of external help are more likely to voluntarily enroll in the transition seminar are consistent with prior theory and research on locus of control and self-regulated learning. In fact, the college transition seminar is designed to assist students in developing skills consistent with an internally oriented locus of control and self-regulated learning.

Similarly, lower levels on all three of these variables characterize students who have the advantages of a more internal locus of control in addition to possessing greater self-confidence in their current ability to use self-regulated learning strategies to meet the academic challenges of college. In terms of locus of control and self-regulated learning

theory, it is understandable that such students are significantly less likely to enroll in the seminar. Consider, for example, that first-year students who believe they, and not luck, classmates, or parents, control their grades (i.e., outcomes) may be more likely to advocate for themselves and seek out campus resources such as mathematics or writing labs and tutoring services. This internal belief that they can master and improve study skills as needed, combined with taking advantage of campus resources, should lead to decreased concerns among first-year students regarding their ability to keep up with coursework. Students with these advantages in terms of their college-going resources, as well as their parents, peers, or others who may be advising them, may not see the transition seminar as a necessary course in their first semester of college.

Research Question: What Is the Effect of
Human Capital On the Decision To Voluntarily
Enroll In a College Transition Course or Seminar?

Human capital, or the combination of knowledge, skills, abilities, attitudes, and talents we possess, is often assessed by measuring first-year students' academic achievement through standardized test scores or high school grade point averages or by measuring academic preparation by evaluating high school curriculums (Adelman, 1999; Perna & Titus, 2005).

ACT-Composite scores have been shown, either alone or combined with high school grade point averages, to add to the predictive ability of pre-admission variables and allow for greater differentiation between students when it comes to projecting success in college (Beecher & Fischer, 1999; Camara & Echternacht, 2000; Mouw & Khanna, 1993; Noble & Sawyer, 2002). Corwin et al. (2005), Paulsen (1990), and Perna (2005) found that following a college preparatory curriculum, one of a series of college-

related decisions that students make, is an important step toward enrolling in a college or university. In particular, prior research on mathematics courses has demonstrated that completing a course more advanced than the second year of high school algebra can increase the odds by more than 200% that a matriculating student will graduate (Adelman, 1999; Choy, 2001; Horn & Nunez, 2000).

In addition to being consistent with past research, this study's findings reveal the interesting patterns of the course selection theory. The nature of the findings with respect to the human capital variables are consistent with the pattern of less advantaged students being more likely to enroll and more advantaged students being less likely to enroll in the transition seminar. In particular, ACT-Composite scores, a common indicator of relative academic advantage or disadvantage in terms of college-going resources, are highly significant and differentiate between more and less academically advantaged first-year students. In this study, students with higher ACT scores had lower odds of enrolling in the transition seminar.

There were two measures of high school curriculum, the amount of mathematics and natural sciences taken, that were found to be significant in explaining voluntarily enrollment in the transition seminar. The levels of both mathematics and natural sciences preparation were significant for students who had met but not exceeded the university's admission requirements. This is consistent with past research showing that high school curriculum had a higher correlation than any other measure of academic achievement or preparation with success in earning a four-year degree. Furthermore, the relatively less academically advantaged students who met the admission requirements but took less than four years of natural sciences or mathematics are significantly more likely to take the

college transition seminar compared to the more academically advantaged students who met and exceeded the admission requirements. It is likely that these students who could be considered relatively less advantaged recognize that, even though they may have the necessary academic preparation to be admitted, they are not as prepared as some of their more advantaged peers and so are more willing to voluntarily enroll in the first-year transition course.

Additional support for this same pattern is found in the finding that those students who enter college with greater academic advantage, measured by having earned college credit through exams, are significantly less likely than their less advantaged peers to enroll in the college transition seminar. For instance, earning college credit in English remained significant once it was entered in Block 2 with the other human capital variables until it was marginally significant ($p = .051$) in the final step of the model.

Research Question: What Is the Effect of
Financial Capital On the Decision To Voluntarily
Enroll In a College Transition Course or Seminar?

Financial capital is related to family income and directly impacts family habitus by influencing the quantity and the type of interactions within an individual's social class, community, and school environment. The information accessible and available to students about colleges, college choice, and the academic or social transition issues of going to college will be affected by their socioeconomic status and the resources of the school attended (i.e., type of curriculum or number and role of school counselors). Each of these, in turn, can affect students in areas ranging from completing college applications and financial aid forms, preparing for and taking standardized tests, or participating in pre-enrollment programs (Hans-Vaughn, 2004; Hossler et al., 1999;

McConnell, 2000; McDonough, 1997, 2005; Pascarella et al., 2004; Terenzini et al., 1996; Tierney & Auerbach, 2005).

In this study, the effects of the financial capital variables also reveal distinctions between the course selection behaviors of relatively more advantaged and disadvantaged students. The significant independent variable that increases the odds of students voluntarily enrolling in the first-year transition seminar is the amount of Pell Grant (in thousands of dollars) received as financial aid ($p = .043$). Students from lower-income families are more likely to receive financial aid than students from higher-income families and this aid is more likely to be in the form of grants rather than loans.

Eligibility for a Pell Grant is a prominent marker of financial capital and lower socioeconomic status and is a common indicator of relative academic advantage or disadvantage in terms of college-going resources. This study's finding that those students who receive Pell Grants, and thus are more disadvantaged in terms of financial capital college-going resources, are more likely to register for the college transition seminar than their more advantaged peers provides further support for the general theme of this study's findings: less advantaged students are more likely to voluntarily enroll in the seminar. As these results are evaluated, it is important to remember that lower-income students are often older, from traditionally underrepresented racial or ethnic groups, be first-generation students, and have lower levels of socioeconomic status.

There was also one significant financial capital variable that shows decreased odds of enrolling in the transition seminar, the importance of the cost of attending the university ($p = .037$). Working within the context of this same general pattern of findings for voluntary course selection behavior of more versus less advantaged students, this

finding is somewhat complex. College choice and other college-related decisions are often influenced by students' perceptions regarding the ability of their own financial and academic resources to match the cost and academic quality of the colleges or universities they are considering. If students are from families with higher socioeconomic status, they would tend to be less concerned with the cost of attending than their peers from lower socioeconomic homes. Even in these higher socioeconomic homes, however, there would be variability in the level and nature of the concern. This variation could reduce the odds of voluntarily enrolling in the course, particularly if other characteristics of advantaged students (e.g., higher ACT scores or internal locus of control) have already diminished the perceived need for a transition seminar. On the other hand, students from families with lower socioeconomic status and lesser degrees of college-going resources would tend to be more concerned with the cost of attending. For these students, however, the use of limited tuition dollars on an elective first-year transition course may not be considered a necessary expenditure even if other conditions indicative of more disadvantaged students would increase the perceived need for, and likely voluntary enrollment in, the transition seminar.

Research Question: What Is the Effect of
Social Capital On the Decision To Voluntarily
Enroll In a College Transition Course or Seminar?

The most common measure of social capital in college choice models has been to evaluate the amount of parental involvement in choosing if, when, and where to go to college. Greater access to social capital tends to be associated with the dominant cultures and continuing generation students from upper- and middle-class families with higher degrees of academic aptitude and academic achievement who have been more heavily

involved in high school extracurricular or community activities. Students lacking in social capital are typically first-generation students from families with lower socioeconomic status and high school academic achievement or measures of academic aptitude that put them in at-risk categories. Social capital can act as a gatekeeper, allowing for or limiting access to other forms of capital (e.g., human or cultural capital) in addition to institutional resources and support (Coleman, 1988; DiMaggio & Mohr, 1985; Lamont & Lareau, 1988; Perna, 2000; Perna & Titus, 2005).

This study's findings related to social capital models the literature quite well. The only social capital independent variable that is significantly related to voluntary enrollment in the transition seminar is the importance placed on advice from parents, relatives, or friends (i.e., parental or family encouragement); this variable was significant ($p = .019$) and had a positive odds ratio ($\text{Exp}(b) = 1.127$). It is important to note that how parental encouragement materializes may differ across racial, ethnic, or socioeconomic boundaries. Majority students with college educated parents who come from higher socioeconomic backgrounds receive support when their parents openly discuss college-going plans, initiate a plan to save for college, and, as seen with human capital, encourage earlier or advanced level mathematics courses. First-generation students from underrepresented groups and lower socioeconomic status families, however, are more likely to have parents that provide moral and emotional support and motivation or work more than one job to try and save for college. In these instances it is older siblings, other family members, or peers with college experience that provide more direct engagement and support related to going to college (Bergerson, 2007; Cabrera & La Nasa, 2000; Choy, 2001; Corwin et al., 2005; Horvat, 2001; Hossler et al., 1989; Hossler et al., 1999;

Horn & Nunez, 2000; McDonough, 1997, 2005; Paulsen, 1990; Perna & Titus, 2005; Tierney & Auerbach, 2005).

This finding is expected and is consistent with the course selection theory. Voluntary enrollment in the transition seminar due to a greater importance placed on family advice may depend on whether or not, and what type, of parental encouragement to enroll exists. Some parents who are college graduates may feel the seminar is unnecessary because they are available to give advice on the academic and social adjustments to college. Alternatively, other continuing-generation students who place high importance on family advice could have a greater likelihood to enroll as a result of parental encouragement precisely because their parents *do* understand how college works and all of the advantages that come with participating in a first-year seminar.

First-generation students, on the other hand, may receive a very different message that the transition course is essential in order to learn what their parents are unable to pass along. First-generation students who place high importance on family advice could generate greater enrollment odds when their parents recognize they do not possess a great deal of social capital and want their sons or daughters exposed to and accumulating as much social capital as possible early in their college careers by voluntarily enrolling in the college transition course.

Research Question: What Is the Effect of
Cultural Capital On the Decision To Voluntarily
Enroll In a College Transition Course or Seminar?

Cultural capital can be understood as the linguistic structures, cultural knowledge, school-related information, knowledge of the values of higher education, and educational credentials of the upper- and middle-, or dominant, classes. These are representations of

symbolic wealth and are passed on in upper- and middle-class families to enable succeeding generations to continue defining and sustaining their class status and accompanying advantages. Cultural capital develops and is passed on in families as a result of their habitus and actions; trips to the theatre, concerts, or museums tend to take on the same importance and carry on from one generation to the next. Bourdieu (1977) felt that the possession of cultural goods as symbolic goods is only possible for those who understand or appreciate them and used trips to museums – which do not have to be limited by socioeconomic status – to make this point: museum attendance tends to increase with education and is more prevalent in more privileged classes (Bourdieu, 1977; Dumais, 2002; Lamont & Lareau, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna & Titus, 2005; Walpole, 2003).

In higher education, cultural capital has often been studied in the form of embodied cultural capital, or the ability to value and identify with cultural goods. Embodied cultural capital is widely measured by assessing students' interest in music or the arts (Bourdieu, 1977; Dumais, 2002). In this study, it is measured as the ability to appreciate fine arts, music, and literature and is both significant ($p = .000$) and has a negative effect ($\text{Exp}(b) = .854$) on voluntarily enrolling in the first-year transition course. This result was expected and is consistent with and supportive of the course selection theory. If cultural capital does legitimize power and allows for the continued definition and sustainment of stratified classes, it follows that students from the dominant classes – who are most likely continuing generation majority students with higher socioeconomic status – may not feel it is necessary to enroll in a transition seminar. This is especially true because of the wealth of college-going resources for academic success that they

already possess is reinforced when these students neither receive nor perceive parental encouragement to enroll. The fact that more involvement in political groups shows a similar pattern ($p = .026$, $\text{Exp}(b) = .901$) supports this; students with a habitus that they believe entitles them to access and participation in the political process also enroll less often.

A very different pattern seems to be at work for the cultural capital independent variables with positive odds ratios for enrolling in the transition seminar. These variables were involvement in community service or volunteer work ($p = .010$), involvement in racial or ethnic organizations ($p = .012$), and involvement in cheerleading, dance team, or poms ($p = .000$). These results are in line with previous findings (e.g., Rice and Darke (2000) and Ting (1997)) about leadership, involvement, and community service. It is possible service has become an even more important explanatory variable with the disasters in the past decade. Spurred by the terrorist attacks of September 11, 2001, the volunteer rate of college-aged Americans increased twenty percent between 2002 and 2005; students attending college during this time period were in high school in 2001. This trend of increased volunteerism and service to others continued in the wake of Hurricane Katrina in 2007 (*College students helping*, 2006; *More than 1.1 million volunteers*, 2007).

Family cultural capital and the high school attended may be less influential for each of these variables than for the measures of cultural capital more closely tied to affluence. School or community volunteer work may have limited or no transportation costs because it is sponsored by a school, church, or other organization. Likewise the costs of coaching or instruction, equipment, or travel associated with participating in

cheerleading, dance team, or poms, may no longer have to be addressed if they, too, are subsidized by a school or community organization. Participation in these activities, especially if they take place during regular school hours or on weekends, may still allow students to work part-time or honor other family or community commitments. In each of these variables, whether it is a service group, cheerleading, dance team, or poms squad, or racial or ethnic group, students may have acquired the lesson of the value of belonging to a community or of teamwork in successfully completing a project or task. The result is students may view enrolling in the first-year transition seminar as a way to begin creating these same connections or communities on the college campus.

These findings are also consistent with the general pattern in this study that students who are relatively more advantaged in terms of college-going resources are less likely to enroll than their less advantaged peers. This is evident because the cultural capital variables most commonly associated with privilege or advantage (i.e., appreciation of fine arts, music, and literature or involvement in political groups) are both significant and negatively related to enrolling in a first-year seminar that helps students transition to and be successful in college. These cultural capital variables are in contrast to the cultural capital variables of race or ethnic group membership, engagement in community service or volunteering, and involvement in cheerleading, dance team, or poms. Each of these variables are less commonly associated with affluence or advantage and are all significantly and positively related to voluntary enrollment in the college transition course.

Implications for Theory

This attempt to adapt college choice theory to a model for course selection was,

overall, successful. Many of the independent variables that were expected to play an important role in explaining students enrollment-related decisions did so (e.g., ACT, parental encouragement, appreciation of fine arts, music, and literature). The log-likelihood of each block, or step, of the model was significant with the exception of financial capital ($p = .092$) and the log-likelihood for the overall model was significant ($p = .000$) after each of the five blocks of variables was entered. This study supports the hypothesis that the student choice construct (Paulsen & St. John, 1997, 2002; St. John et al., 2001) and college choice theory (Hossler et al., 1999; Paulsen, 1990; Perna, 2006) can be applied to explaining other college-related decisions that students make such as course enrollment decisions and complements the empirical tests of these concepts and theories that were reflected in the work of Salisbury and colleagues (Salisbury et al., 2009; Salisbury et al., 2010). Unlike the studies by Salisbury and colleagues that involved precollege levels of capital and capital gained during the first year of college, however, this study focused only on precollege variables and emphasized curricular choices that were made over a two-day period in a summer orientation taking place before the first semester of college instead of over a period of many months during the first year of college.

The primary purpose of this study was not the prediction of enrollment behavior. Rather, the goal was to determine whether or not a college choice model could be adapted to a course selection model by examining each independent variable with regard to whether or not it was significant in a student's decision to voluntarily enroll in a first-year transition seminar. In order to evaluate whether or not this model can be used to accurately predict enrollment in a first-year transition course, probability equations could

be developed and used on a future cohort to try and predict enrollment (Menard, 2002). It is interesting to further hypothesize, on the basis of both this study and the work by Salisbury and colleagues, what role is played by habitus and the various forms of capital in a wide range of students' choices related to curriculum or academic major that are made prior to or during the first year of college and how these decision-making processes differ by student's level of academic preparation, gender, family socioeconomic status, or levels and types of extracurricular involvement.

A recurring pattern in the results of this study are the persistent differences between students with characteristics of the upper- and middle-classes, in which students are more advantaged in terms of college-going resources, and students with characteristics from lower socioeconomic classes who are less advantaged in terms of their college-going resources. Most of the variables that significantly affected students' decisions about enrolling in the college transition seminar had opposite effects on the likelihood of enrollment for students who were more advantaged in terms of these variables compared to their peers who were more disadvantaged. More advantaged students were less likely to enroll in the transition seminar; this includes students with higher ACT scores or greater levels of appreciation of fine arts, music, and literature. Conversely, more disadvantaged students had greater likelihoods of enrolling in the transition seminar; students receiving Pell Grants or with less mathematics or natural sciences preparation in high school, for instance, had higher odds of enrolling.

The literature has shown that all students will benefit from a first-year transition experience (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001). It is important that this study establishes a

new theoretical foundation for a better and deeper understanding about how and why students who are, or believe they are, academically, financially, socially, and culturally advantaged and ready for college tend to choose to opt out of this seminar. Although studies of retention or graduation outcomes from participation in seminars and student success have been done in the past (Barefoot, 2004; Bolender, 1994; Boudreau & Kromrey, 1994; Davis, 1992; Engle et al., 2004; Fidler, 1991; Lipsky & Ender, 1990; Muraskin, 1998; *National collegiate retention*, 2010; Ryan & Glenn, 2004; Schnell, & Doetkott, 2003; Sidle & McReynolds, 1999; Wilkie & Kuckuck, 1989; Williford et al., 2001), these studies explored only the outcomes of participation and did not include the reasons behind students' enrollment decisions. This study provides the necessary theoretical foundation for the next generation of studies that will include the reasons students enroll in a transition seminar in the analyses.

Implications for Policy and Practice

The purpose of this study was to determine whether or not a college choice model could be adapted to a course selection model by examining a variety of individual background (e.g., locus of control or gender) and capital (i.e., human, financial, social, and cultural) independent variables with regard to whether or not they were significant in the decision to voluntarily enroll in a first-year transition course or seminar. Students who are targeted for these college transition courses are often members of a specific group who may be considered at-risk. Examples include first-generation students, underprepared, or lower socioeconomic status students who may become the focus of college personnel with the belief that these students are matriculating not only with the common anxieties of any first-year college student, but that they may also experience a

different kind of culture shock from living and learning with students with levels, types, or degrees of habitus or capital that are quite different from their own. This, combined with the knowledge that first-generation students are more likely to arrive on campus with lower measures of college-going resources than their continuing generation peers in comparisons of standardized test scores, high school grade point averages, and confidence in their ability to be academically successful in college, makes them ideal candidates to target for enrolling in a first-year transition course or seminar. The findings of this study are consistent with this practice.

What past policies and practices may have discounted, however, is that all first-year students – regardless of their admissions profile – can benefit from participating in these types of courses. Depending on institution type, retention rates vary from 55.7% to 68.7% (*National collegiate retention*, 2010), but Tinto (1993) found that only 15-25% of this attrition was the result of poor academic performance by first-year students. Any first-year student, regardless of demographic or socioeconomic background, can experience difficulty with the academic and social transitions to college. Participating in a first-year seminar aides in these transitions, particularly when first-year students are able to learn about campus resources and culture and become aware of how things are done at their college, earn higher grade point averages, experience lower rates of academic probation or academic dismissals, and experience higher retention and graduation rates (Barefoot, 2004; Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Pascarella & Terenzini, 2005; Schnell & Doetkott, 2003; Sidle & McReynolds, 1999; Tinto, 1975; Upcraft et al., 2005; Wilkie & Kuckuck, 1989; Williford et al., 2001).

This study demonstrates that first-year students who are more advantaged in terms

of college-going resources voluntarily enroll in the first-year transition seminar less often when compared to their less advantaged peers. It is essential for higher education administrators to realize that increased first-year retention rates and, ultimately, graduation rates may be realized by targeting not only those students who are perceived to be at-risk and therefore in need of assistance with the academic and social transitions to college, but by targeting *all* first-year students because they would benefit from this type of intervention even if it is not required or they are unwilling to voluntarily enroll.

This study found independent variables related to developing or improving an internal locus of control (e.g., need help with study skills) to be significant and associated with higher rates of enrolling in the course. These topics, along with motivation or goal setting, health and relationship related topics, financial management, and the overall academic and social transition to college are covered in a first-year transition seminar. Allowing students to self-select into this course makes it important for the institution to supplement a self-selection policy with other policies focused on recruiting students from more advantaged homes to the transition seminar. This is particularly true for students who may be unprepared to meet familial pressures and academic expectations and, because of family habitus, believe they should not, or cannot, enroll in this type of course.

The literature reviewed in Chapter II has shown that financial, social, and cultural capital can impact the college-going aspirations, expectations, and performance of students with lower levels of these forms of capital but equal levels of human capital. Socioeconomic status, first-generation status, and the type and location of students' high schools can become barriers in terms of learning about and completing college

applications and financial aid forms, preparing for and taking standardized tests such as the ACT or SAT, or participating in pre-enrollment programs (Everson & Millsap, 2004; Hans-Vaughn, 2004; Hossler et al., 1999; McConnell, 2000; McDonough, 1997, 2005; Pascarella et al., 2004; Terenzini et al., 1996; Tierney & Auerbach, 2005). Students facing such barriers are also more likely to continue living at home, not be actively involved in campus life, work close to full-time (usually off-campus), and enroll only part-time (Choy, 2001; Lohfink & Paulsen, 2005; McConnell, 2000; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Paulsen & St. John, 2002; Terenzini et al., 1996; York-Anderson & Bowman, 1991). Each of these factors can become another form of barrier after matriculation when students do not have opportunities to interact with or gain capital from their peers.

Colleges and universities can attempt to correct for this by intentionally and explicitly encouraging every first-year student to enroll in a college transition course based on (a) the knowledge that all students will benefit, (b) our understanding that first-year students may seek to register for classes where they will fit in academically, socially, and culturally the same way they search for colleges where they will fit in academically, socially, and culturally (Horvat, 2001; Hossler et al., 1989; Paulsen, 1990), and (c) the knowledge and understanding of the factors in this study that proved to be significant or explanatory for students' decisions to enroll in the transition seminar. Students with admissions profiles that would lead higher education administrators to believe they are more likely to be successful and graduate (i.e., higher socioeconomic status, more exposure to cultural activities, more affluent high schools or college preparatory curriculums, and higher ACT scores) are typically not required to enroll, and may not

even be encouraged to enroll by the institution or their parents, in this type of course during their first semester on campus. Based on their academic preparation or admissions profile, this may also be true for continuing generation students from less affluent families or who have less social or cultural capital.

One example of an approach to targeting students who would benefit from this type of intervention but may not necessarily voluntarily enroll is for colleges and universities to focus on cultural capital variables that were significant, had positive odds ratios, and are less dependent on family socioeconomic status or the resources of the high school attended. Students involved in community service, volunteer work, or school-related activities can be encouraged to enroll in the first-year seminar using the commonality of their extracurricular or community activities and the knowledge that the other students enrolled will be like them.

A family habitus of service to others, for instance, may not be bound by socioeconomic status. Students from more affluent families may see volunteering or community service as a way of giving back or demonstrating gratitude for what they have. Students from lower socioeconomic status homes may take their cues from the self-sacrifice or other symbolic actions of their parents that has enabled them to pursue going to college (Tierney & Auerbach, 2005) and develop similar values and beliefs (or habitus) about service to others. Interacting or working on a common goal through a school, community, or church, such as a mission trip or building a house through Habitat for Humanity, allows these students to interact and facilitates the sharing of social and cultural capital while, at the same time, reinforcing the similarities among the participants. Similar parallels can be drawn with other cultural capital measures that

involve creating social connections or a sense of community and working together toward a common goal (e.g., involvement in a racial or ethnic organization or cheerleading, dance team, or poms). Colleges and universities should consider incorporating enrollment in a first-year transition seminar as a way to begin creating these types of connections or communities on a college campus.

Social capital can play a role in improving transition course enrollment rates by enlisting parental encouragement to enroll. Because the Entering Student Survey may be completed at any point between when students are admitted to the university and when they arrive for orientation, student responses to survey questions may be known well in advance of when students register for their first semester courses. Both students and their parents can be educated about the transition seminar and its benefits weeks before arriving on campus for orientation as well as during the student and parent sessions that are part of orientation. Human capital can be incorporated by creating and disseminating a profile of the students who have enrolled in the seminar in the past. By citing average ACT scores or the amounts of high school mathematics and natural sciences taken along with referencing the types and amounts of high school or community activities, students and parents can realize that by enrolling in the college transition seminar they will be enrolling not only in a class with a highly diverse group of students but also a class where they will fit in academically, socially, and culturally. As each enrolled student gains the benefits of taking this course during their first and subsequent semesters on campus, retention and graduation rates each have the opportunity to increase.

Colleges and universities can also explore combining a transition course or seminar with other efforts designed to assist with the academic and social transitions to

college. Tinto (1999) challenged colleges and universities to go further than a “single course,” advocating primarily for the establishment of learning communities or some form of linked registrations or courses-in-common. Similar to participants in first-year seminars, students who are members of learning communities have been found to have higher grade point averages, earn more credits, become more satisfied with their college experience, and are less likely to be placed on academic probation than their peers not participating in learning communities. Learning communities may be more effective at increasing retention on commuter campuses because they tend to rely less on on-campus residence and may be viewed as less exclusionary by nontraditional students (Baker & Pomerantz, 2000; Bean & Eaton, 2001; Johnson, 2000). Other alternative first-year interventions that could be readily connected with enrollment in a transition course or seminar include cooperative or collaborative learning or service learning opportunities.

Increasing enrollments in a transition course cannot happen without an institutional commitment to the resources necessary to provide this experience for first-year students. An entering class of 4,000 students requires 200 classrooms and instructors if class sizes are set at 20 students and 267 if class sizes are set at 15 students. From a facility standpoint, it may not be possible to find this many classrooms or meeting spaces when campuses are already experiencing strains on technology and facilities. To compensate instructors, for example at \$1,500 each, would require an expenditure of between \$300,000 and \$400,500 depending on class size and the number of instructors needed. An increase in retention of 1% at this university, however, has the potential to generate as much as \$2 million in additional revenue for the university and surrounding community which could be used to offset the costs of offering a transition course or

seminar to each entering first-year student (*Final report, 2009*).

Implications for Future Research

This study supports using the student choice construct (Paulsen & St. John, 1997, 2002; St. John et al., 2001) and the factors involved in college choice theory (Hossler et al., 1989; Hossler et al., 1999; Paulsen, 1990; Perna, 2006; Perna & Titus, 2005) as a means to investigate how other college-related decisions (Salisbury et al., 2009), such as which courses to take, are made. Independent variables in each block of background variables or forms of capital (e.g., need help with study skills, ACT scores, amount of mathematics taken in high school, amount of Pell Grant received, parental encouragement, and ability to appreciate fine arts, music, and literature) proved to be statistically significant variables related to explaining the voluntary enrollment in a college transition course or seminar.

Along with providing ideas for theory advancement, guides for first-year student policy, practical alternatives to assist in improving retention and, eventually, graduation rates, this study has also provided ideas for future research in the areas listed below.

The results of this study clearly indicate that the student choice construct and college choice theory can be effectively adapted to develop a course selection theory that explains whether or not students will enroll in a first-year transition seminar. Perhaps the most productive and broadest area for future research building on this study is to use this model as a means to investigate how other college-related decisions are made. The first known example of this type of new study involves an examination of how students develop aspirations to make the curricular choice of planning to study abroad while in college (Salisbury et al., 2009). As developed through the student choice construct itself,

however, there is a sequence of college-related choices to which this model could be applied in future research. Some of these include examining how selected background and other college-going resources parallel to those used in the present study impact students decisions regarding choice of major, choice of electives, choice of learning community participation, choice of service-learning participation, choice of when and how to use campus resources (e.g., tutoring, mathematics or writing centers, student health or counseling services), choice to self-identify and use resources for learning disabilities, or choice to attend a graduate or professional school.

Background Variables

This study was conducted using the 2006-2007 and 2007-2008 first-year cohorts as a whole. In the future, analyses should be done separately by gender; in this study gender was only a single background variable and had no significant effect on voluntary enrollment. The literature has shown that men and women go about the process of selecting colleges differently and this may very well translate into differences in how they select courses after enrolling. Women tend to place more emphasis on advice from parents and males tend to place more importance on advice from coaches. Advice from parents, relatives, or friends was significant in this study, but advice from school counselors or teachers was not. This latter finding may be reversed if the sample is separated based on gender. For instance, with male students advice from school personnel may be significant, especially if the school counselors or teachers are also coaches. The results for the time spent speaking to teachers outside of class or the influence of participation in varsity athletics could also change with a male-only sample compared to a female-only sample.

Similarly, it is possible some background variables (e.g., concerns with making friends), financial capital variables (i.e., importance of financial aid or concerns with paying for college), and cultural capital variables could have different and significant effects if female and male students are examined separately in a future study (Bouse & Hossler, 1991; Galotti & Mark, 1994; Lundgren & Rudawsky, 1998; Mansfield & Warwick, 2006; Salisbury et al., 2010; Shank & Beasley, 1998). Interactions between gender and the following variables related to various forms of capital may also reveal important differences in how male and female first-year students select courses: first-generation student status, socioeconomic status, financial concerns such as paying for college or amount of time that will be spent working, campus location, and degree aspirations (Sax, 2008).

Human Capital

The literature review and the results of this study indicate that a range of human capital variables are significantly related to college choice and to a sequence of other college-related decisions such as students' course enrollment or other curricular decisions (Salisbury, et al., 2009; Salisbury et al., 2010). Among those variables found to be significantly related to whether or not students enroll in the first-year transition course were ACT scores and high school academic preparation in mathematics and natural sciences. Although first-generation student status was a financial capital variable in this study, levels of parental education can be a measure of human capital in future studies. Previous research has found that first-generation students are more likely than their continuing generation peers to matriculate with less academic preparation for college (Hans-Vaughn, 2004; Inman & Mayes, 1999; Lamont & Lareau, 1988; McCarron &

Inkelas, 2006; McConnell, 2000; Pratt & Skaggs, 1989; Terenzini et al., 1996).

As previously noted, a persistent theme or pattern across the overall findings of this study indicates consistent differences between how various factors impact the course selection behavior of students who are less advantaged in terms of college-going resources relative to their more advantaged peers. Human capital measures of ACT-Composite scores and certain high school curricular subjects significant in this study have exposed a potentially revealing area for future research that would focus on studying how background or capital-related factors impact decisions regarding voluntary enrollment in a college transition seminar that are different for first-generation students compared to continuing generation students. Separate analyses of how background factors and various forms of capital have different effects on course selection behaviors would provide an opportunity to explore more fully why students who are less advantaged in terms of their college-going resources, compared to their more advantaged continuing generation peers, respond in often opposite ways to changes in a variety of factors impacting their course selection behaviors.

Financial Capital

In the present study, receiving a Pell Grant and the importance students place on college costs and affordability are included in the model but only the variable receiving a Pell Grant is significant in choosing to voluntarily enroll in the first-year seminar. Another financial capital variable that could be of particular interest in a future study of enrollment behaviors would be institutional scholarships requiring both participation in and completion of a transition seminar during the first semester. Such a variable, if significant and supportive of the findings by Rice and Darke (2000), could identify

another financial capital variable to use to target students for enrollment as well as revealing the nature and extent to which such forms of institutional financial aid have on incentivizing students' course selection behaviors.

A second suggestion for future research in this area involves the definition used for first-generation student status. In this study, the traditional definition that neither parent had any postsecondary experience was used and, with this definition, only 645 (8.5%) of the students were classified as first-generation students. Using a more flexible or expansive definition (e.g., some college experience but did not earn a four-year degree) would lead to a less skewed distribution of the variables and greater balance in cell sizes which may lead to different statistical and substantive results. These results may be more meaningful because variations in the definition of first-generation student and socioeconomic status, which can be viewed or conceptualized as indicators of financial capital, could also reveal variations in and different perceptions and effects of the college-going resources available to students when they make their college-choice and course selection decisions.

Social Capital

As discussed previously, how social capital, particularly parental encouragement and influence, manifests itself differs between families in the dominant culture and families that are not in the dominant culture. Because of the low numbers of nonwhite students in this sample, race was not used as an independent variable. Should this study be replicated at a college or university with a much more diverse student body, incorporating race as an additional explanatory variable may lead to results that support the findings of Tierney and Auerbach (2005). These authors found that parents in families

of color or low socioeconomic status encourage their children's college-going aspirations, and perhaps their course selection behaviors, in ways that are different from the more traditional ways outlined by Coleman (1988) and widely used in research involving social capital.

An even more potent future study would be one based on a sample size sufficient to examine different racial and ethnic groups in separate samples that will allow for a broader examination to determine if and how cultural differences might reveal patterns specific to race or ethnicity that are associated with individual variations in access to and use of social capital and other college-going resources. These variations, in turn, may have a variety of different impacts on students' decision-making processes regarding whether or not to voluntarily enroll in a first-year transition seminar.

Finally, parental encouragement, perhaps the most important social capital variable, was significant in explaining course selection behavior. Because the importance of family influence was significant in this study, another important area for further research would be a qualitative study that explores more deeply how and why parental encouragement influences students' decisions regarding voluntarily enrollment in the college transition seminar.

Cultural Capital

Cultural capital provides many possibilities to extend this research and conduct future analyses on how any number of college-related decisions may be made. As discussed earlier, cultural capital variables that include some form of team or group membership are effective indicators of voluntary enrollment in the college transition seminar in ways that are potentially quite distinct from those cultural capital variables

that more often lead to individual achievement. Future researchers may wish to explore this finding further, particularly along the lines of the various forms of Bourdieuan cultural capital in addition to social class. A greater understanding of possible interactions among these cultural capital variables and how college-related decisions – such as whether or not to enroll in a transition course – are made would enhance not only policy and practice developed at the college level to increase seminar enrollments, but also policy and practice related to how college preparatory programs are developed and implemented. This latter point may be especially true for those programs targeting underrepresented or low-income students lacking in college-going resources (Tierney & Colyar, 2005).

Future research could be conducted by combining social capital variables such as speaking to teachers or school counselors with cultural capital variables such as forming college degree aspirations. Such studies would be essential in order to effectively examine the possible interaction effects of social and cultural capital independent variables on students' course selection behavior regarding the college transition seminar. Is there a difference in the effect on voluntary enrollment from degree aspirations (a cultural capital variable) for students who are more or less engaged in speaking to their teachers or school counselors outside of the classroom (a social capital variable) about college-going plans, aspirations, and advantages of first-year courses? Because of the substantial differences in resources and organizational habitus in different schools, do the main and interaction effects further vary by the type of high school attended? What about the role of speaking with school personnel when the coaches or directors students interact with in sports or arts-related activities are teachers or school counselors?

Tinto (1975) incorporated goal commitment and institutional commitment into his retention theory. Institutional commitment, or why a specific college was chosen, may be increased through social integration, which may be increased when students develop relationships with each other, faculty, and staff and are active participants in campus life. This study revealed that cultural capital variables associated with creating connections or a sense of community (i.e., community service or volunteer work, involvement in racial or ethnic organizations, or involvement in cheerleading, dance team, or poms) that can lead to social integration were significantly and positively associated with voluntarily enrolling in the college transition course. Institutions possessing both a first-year transition experience and a way to assess students' institutional commitment could study whether or not significant differences exist in the levels of institutional commitment between seminar participants and nonparticipants.

If this study were to be replicated at a more heterogeneous institution, whether or not English was the primary language spoken in the home could provide interesting data on an additional cultural capital variable relevant to future policy or practice. From the literature, we know that first-generation students and students from working- and lower-class families, or from certain racial or ethnic groups, may not demonstrate the same social, linguistic, and cultural competencies as the dominant classes as well as their peers who have been taught the dominant classes' language codes (Collier & Morgan, 2008; Lamont & Lareau, 1988; Perna & Titus, 2005).

Other

Finally, it would be valuable to conduct a prediction-focused analysis to use this study as a foundation to try and predict which students will enroll in the first-year college

transition seminar and to determine whether or not this course selection model is as adequate in predicting course enrollment or other college-related decision-making outcomes as it is in its attempt to explain these behaviors. Because this institution will most likely have access to the scores from students' Entering Student Survey in advance of when the first-year students arrive on campus for their orientation, an attempt could be made to predict who will enroll in the seminar with subsequent comparisons to actual voluntary enrollment behavior after the first semester has begun. Other institutions could pursue similar predictive applications of the model in their offices of institutional research within the constraints of survey data availabilities.

Conclusion

The purpose of this study was to determine whether or not the student choice construct and a college choice model could be adapted to a course selection model by examining a variety of individual background (e.g., gender and locus of control) and capital (i.e., human, financial, social, and cultural) independent variables with regard to whether or not they were significant in the decision to voluntarily enroll in a first-year transition course or seminar. Students who are targeted for these courses are often members of a specific group who may be considered at-risk. Results of this study show that students from advantaged backgrounds (e.g., higher ACT-Composite scores or a higher self-evaluation of their ability to appreciate fine arts, music, and literature) are less likely to enroll in the college transition seminar than students that could be described as more disadvantaged in terms of their college-going resources (i.e., individual background characteristics and types and quantities of various forms of capital). It is necessary for higher education administrators to begin to understand that increased first-year retention

rates and, subsequently, graduation rates may be realized by encouraging or requiring all students to enroll, not just those students who may not fit into a predetermined at-risk category. This is especially true given that the literature has shown that all students who participate in this type of intervention will benefit from the experience (Davis, 1992; Engle et al., 2004; Fidler, 1991; Muraskin, 1998; Sidle & McReynolds, 1999; Williford et al., 2001).

This study has demonstrated that the student choice construct developed by St. John and colleagues (Paulsen & St. John, 1997, 2002; St. John et al., 2001) and the theories and models of college choice analyzed by Hossler et al. (1989), Hossler et al. (1999), Paulsen (1990), and Perna (2006) can be adapted to other decision-making behaviors associated with attending college. In this instance, the adapted course selection model provided an effective way to explain voluntary course enrollment in a first-year or college transition seminar.

Although the model proved to be effective, it can certainly be improved through future research, such as studies that examine the effects of variables on course selection for groups that merit separation by gender, parental education, income, race, or other characteristics. Institutions, particularly those that survey their entering classes before they even arrive on campus, should continue to explore this and other ways to productively use student data already being generated to continue developing new and innovative ways to holistically intervene with first-year students, target and encourage enrollment in these types of seminars, and to improve retention and graduation rates. In addition to ACT scores and facilitating parental encouragement to enroll, if self-ratings of cultural capital are available, specific attention should be paid to extracurricular activities

that enable students to work together as teams, build community, and reach a common goal: students rating themselves high in one or more of these areas should be identified as candidates to enroll in a college transition course or seminar during their first semester of college. This, combined with first-year students desire to enroll in a college or university, and most likely a course, where they will fit in with their peers academically, socially, and culturally can lead to positive first semester academic and social transitions, increased retention, and increased graduation rates.

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