UNDERSTANDING TRANSFER STUDENT BACHELOR'S DEGREE ATTAINMENT: USING BOURDIEU'S THEORY OF SOCIAL REPRODUCTION

by

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ABSTRACT

The purpose of this study was to examine and understand the relationship between factors that contribute to or inhibit bachelor's degree attainment utilizing Bourdieu's framework of social reproduction theory. Bourdieu's concepts of capital, habitus, and field were examined with regard to bachelor's degree attainment for students who entered postsecondary education at a public, 2-year or at a public, 4-year institution through a series of multilevel logistic regressions using the Beginning Postsecondary Longitudinal Survey (BPS) and the Integrated Postsecondary Education Data System (IPEDS). Bourdieu's framework was applied to develop an analytical understanding of social reproduction and the role of education in transcending class-based inequalities as well as implications for policy and practice for both 2-year and 4-year institutional sectors.

This dissertation is dedicated to the memory of my father, Dan Brown.

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CHAPTER I

INTRODUCTION

The goal, according to a 2009 initiative by President Obama and the College Board, is to increase the proportion of 25- to 34-year-olds who hold an associate's degree or higher to 55% by the year 2020. Projections for the workforce indicate that the majority of higher paying jobs added to the job market between 2004 and 2020 will require postsecondary education or training as the nation moves out of recession, out of an industrial economy, and into a service economy (Carnevale, Smith, & Strohl, 2010). The completion goal is about making the United States a leader in educational attainment once again, but also about creating an educated workforce to improve global competitiveness for the nation in the years to come (Lee & Ransom, 2011). The percentage of adults age 25-34 with a postsecondary education in 2010 was 39% (U.S. Census Bureau, 2010). In order to meet the completion goal, 10 million more graduates from community colleges and 4-year colleges and universities will need to attain at least an associate's degree.

Educational attainment is often cited as an equalizing factor against social inequities and a means to climb the social ladder (Lee & Bowen, 2006; Mills & Gale, 2007; Walpole, 2003). Those who attain higher levels of education make more money and achieve a better quality of life than those who do not. The United States Census

Bureau reported that in 2009, workers with a regular high school diploma earned about \$27,000, and those with a GED earned about \$23,000 (Ryan & Siebens, 2012). Those with a bachelor's degree earned about \$48,000. Median earnings for a worker with a bachelor's degree were 77% higher than median earnings for a worker with a regular high school diploma. Carnevale, Smith, and Strohl (2010) found that dropouts, high school graduates, and people with some college but no degree are falling out of the middle-income class, creating two distinct categories of middle-class: "the upwardly mobile college-haves and downwardly mobile college-have-nots" (p. 3). Education is the gateway to training, future career prospects, and greater earning potential. Overall, in order to meet the completion goal and realize the benefits of continuing education, a large number of new college students will have to be added to the system, and soon.

The situation as it currently stands includes nearly doubling the enrollment at many postsecondary institutions. Colleges and universities across the country are feeling the growing pains. Every state has cut appropriations to higher education as a result of the 2008 recession and temporary economic stimulus funds are running out, causing colleges and universities to raise tuition while simultaneously cutting programs and services when the demand is as great as ever (Douglass, 2010). The need for gainful employment, funding shortfalls, and skyrocketing tuition has led many students to opt for a more affordable option as a point of entry into postsecondary education. In light of affordability, convenience, and federal decree, many students seeking a baccalaureate degree enter the community college system before transferring to a 4-year institution.

The completion goal, fueled by the ongoing push for accountability in higher education, has created a renewed interest in student persistence and retention. Research on student persistence has proliferated in recent years, but graduation rates have not improved. For students who started at a 4-year institution in 2004, the 6-year graduation rate was 58% compared to 55% in 1996 (Aud et al., 2012). Transfer students are typically not included in the calculated graduation rate, but will be a significant and growing population to consider as higher education works towards meeting the goal set forth by President Obama.

Although it has been widely documented that engagement and integration are positively and directly linked to learning and degree attainment (Astin, 1993, 1999; Carini, Kuh, & Klein, 2006; Cohen & Brawer, 2008; Kuh, 2003; Kuh, Kinzie, Schuh, & Whitt, 2010; Kuh, Pace, & Vesper, 1997; Pascarella & Terenzini, 2005; Pike & Kuh, 2005; Shulman, 2007), the majority of these studies rely on findings based on research conducted with students at 4-year institutions. Pascarella (1999), for example, noted that no more than 5% of the nearly 3000 studies reviewed in the meta-analysis he co-authored with Terenzini focused on community college students: "this empirical black hole means that we are functioning largely in ignorance of the educational impact of one of the nation's most significant social institutions" (1999, p. 2). The need to understand how community college students navigate the educational system and the transfer process will shape future persistence and retention initiatives as the population grows.

Statement of the Problem

This study comes at a time of heightened interest in increasing the number of citizens in the United States who hold bachelor's degrees. Understanding the role that community colleges play in degree attainment is vital to the success of the President's initiative. Many students choose community colleges as their entry point into

postsecondary education with the goal of transferring and obtaining bachelor's degrees. Additionally, community college students are increasingly diverse and will change the landscape of what it means to be a college student. As students gain entry into community colleges and successively into 4-year schools, it is essential to understand their distinctive needs to ensure their success. To do that, there is a need to examine the structures that either inhibit or assist them toward degree completion and how those structures are understood and internalized.

The purpose of this study, then, is to move beyond traditional measures and theories of student departure. By using Bourdieu's (1984, 2008) theory of social reproduction as the framework for studying departure, the attention shifts from simply looking at surface-level indicators and ascribing a likelihood of persistence to developing an understanding of how institutional structures and values impact students at a deeper level. Changing the policies and practices at an institution may not increase student graduation rates if the systemic causes of departure, found in the deep structures, are not addressed. Therefore, the intent of this research is to examine and understand the relationship between graduation rates and the factors that contribute to or inhibit degree attainment. To understand the relationship between institutions, individuals, and degree attainment, a sociological model that allows for the systematization of the social word may help develop an understanding of the interrelated nature of agents and capital and how those pieces play out in the university field.

Conceptual Framework

Investigating student persistence and retention in higher education has a long history that continues to develop to this day. The definitions used here of persist and retain are taken from Reason (2003) who summarized retention as an organizational phenomenon and persistence as an individual phenomenon where students define what it means to persist, which may or may not be degree completion. This study's focus is persistence, where successful persistence is identified as degree attainment as indicated by students' initial goals when entering institutions of postsecondary education. Persistence increases institutional retention rates and moves towards increasing the national degree attainment rate, and a realization of the Presidential initiative.

Spady's (1971) sociological model was one of the first theoretical attempts to explain college student attrition. The model suggested that the interaction between the individual and the institutional environment provides the space for students to integrate into the academic and social systems of the institution. If the student fails to integrate into the system, the student will have a low level of satisfaction with the institution, which would lead to a decision to leave the system. Important variables in this model included grade performance, intellectual development, normative congruence, and friendship support. Additional important elements included family and cultural background and academic potential. Spady (1971) emphasized the idea that students interact with the college environment and that the environment includes both academic and social endeavors. Successful integration leads to persistence, but students who fail to integrate (lack of consistent interaction with others, low normative congruence, and lacking a sense of compatibility with the social system) opt to drop out (Spady, 1970, p. 78).

Building on Spady's (1971) framework, Tinto (1975, 1993) theorized that students arrive at college with a variety of characteristics and dispositions that affect their initial levels of commitment to an institution. Students, along with the unique characteristics they bring with them, interact with the institution and that interaction affects their level of integration into the institution. The focus of Tinto's model is on the process of student attrition. Specifically, negative interactions between the student and the social and academic systems of the institution impose barriers to integration and distance the student from the institutional community. This distance leads to the decision to drop out.

Tinto (1975, 1993) was most concerned with students' academic and social integration. Tinto's model of academic and social integration relied heavily on student characteristics and how an individual student interacts with the institutional setting. The strength of Tinto's model lies in an institution's ability to assess and modify practices that lead to student attrition. Since Tinto's original publication, studies have argued the relative importance of academic and social integration in the persistence of students (Berger & Braxton, 1998; Braxton, 2000; Pascarella & Terenzini, 2005), but one idea holds constant: when both academic and social integration are present, students are more likely to persist (Stage, 1989).

In the last 20 years, scholars have attempted to evaluate the effectiveness of Tinto's (1993) theory of student departure and have generally found that there is weak empirical support for the theory and that it is not suited for use with nontraditional student populations, including students at community colleges, commuter students, and other nonhomogenous populations (Braxton, 2000; Braxton, Shaw Sullivan, & Johnson, 1997).

In addition to sociological theories related to student retention, Bean and Eaton (2000) proposed a model that suggested that leaving college is a behavior that is psychologically motivated. Entry characteristics are affected by the filter of the institutional environment. As students interact with the environment, "psychological processes take place that, for the successful student, result in positive self-efficacy, reduced stress, increased efficacy, and internal locus of control" (Bean & Eaton, 2000, p. 58). The successful student integrates, leading to increased levels of institutional fit. The combination of institutional fit and integration then leads to a desire to persist, and ultimately, the behavior of persistence. Important variables of consideration for Bean and Eaton (2000) included past academic achievement, socioeconomic status, college GPA, finances, hours of employment, and overall satisfaction.

While recent efforts (Braxton, 2000; Pascarella & Terenzini, 2005; Seidman, 2012) have provided a better understanding of the departure puzzle and the factors that influence students' persistence decisions, many unanswered questions remain. For example, traditional retention and persistence studies have looked at a myriad of factors to explain student departure from college, including institutional factors, individual characteristics, student behaviors and socialization, engagement, as well as the interaction of these elements. However, current literature still lacks a clear and comprehensive conceptualization of how psycho-social factors interrelate with an institution filtered through the lens of an individual's experiences.

Up to this point, persistence has been viewed as a longitudinal process influenced

by the interactions between the individual and the environment, but external variables are treated differently. Cabrera, Nora, and Castaneda (1993) reviewed theories explaining college persistence and examined the extent to which the models could be merged to enhance an understanding of students' decisions to persist or leave. The unified model revealed that environmental variables (i.e., encouragement from friends and family), financial attitudes, and GPA significantly influenced integration and intent to persist.

Moreover, Astin (1993) as a departure from the previous models, focused on student inputs, student outcomes, and the college environment to understand the effect that college has on students. Astin focused on factors that facilitate student development through involvement. He argued that the degree of student learning is directly related to the degree to which a student is involved in his or her own educational experience (1993, 1999). Astin's theory accentuated factors that facilitate student development through involvement.

There are five major postulates of Astin's (1993) theory. The first defines involvement as the investment of physical and psychological energy in various objects that can be both generalized and specific. The second and third points state that involvement occurs along a continuum and can take on both quantitative (e.g., number of hours spent reading) and qualitative (e.g., the actual focus a student had while reading) characteristics. The fourth postulate argues that the amount of learning and personal development is proportional to a student's involvement. Finally, the effectiveness of policy or practice is related to how much it increases student involvement: students need to actively engage in their environment in order for development to take place. The precepts of student engagement, student involvement, and student development are simple: students need to participate in the process of learning to grow and develop, which loops back to learning as both a process and a product. As students become involved and integrated into their environment, they become part of that environment and invested in persisting to degree completion.

Each model contributes to student retention research in higher education in meaningful and significant ways. As seminal as these foundational works have been on retention and persistence, they fail to take into account the multifaceted nature of today's college students, including transfer students. Additional factors beyond involvement and integration contribute to the variance in student attrition and persistence behavior, including background characteristics, levels of academic preparedness, socioeconomic status, and choice of college which significantly complicate traditional models of retention (Chen, 2005; Dumais, 2002; Walpole, 2003; Yosso, 2005). Involvement and integration are inarguably important aspects of a student's decision to persist, but there is a need to recognize that individual agency is determined by individual characteristics, opportunity, and integration that occurs within a set social structure. The social structure of education varies depending on institutional characteristics: location, size, selectivity, and sector all create unique structures with distinctive rules. The rules of the social structure, or field, are largely set by those who are considered as possessing power (Bourdieu, 1973, 1984, 1993). Those with power have achieved a certain level of capital valued by the field. The capital valued changes with each institutional environment.

An alternative theory to traditional retention and persistence studies is rational choice theory. At the most basic level, the theory states that individuals maximize utility given some constraints, and that by "investing in their human capital they will maximize productivity and earnings" (Melguizo, 2011, p. 410). According to this theory, students choose to go to college if the benefits of doing so outweigh the costs. While the expected benefits of completing a college degree are both monetary and nonmonetary, the expected costs of higher education include both direct costs and indirect costs (e.g., tuition, fees, books, and foregone earnings while in school) (Becker, 1993). However, students who lack a clear understanding of the higher education system as well as access to information cannot fully discern the benefits and risks involved in pursuing postsecondary education.

Rational choice theory assumes that all individuals are afforded the same opportunities regardless of background and upbringing, which may not represent the reality of circumstances that may limit or expand choices and opportunities. This theory assumes a straightforward approach to maximizing productivity and downplays structural constraints. It is an American ideal to believe in individuals' power to invest in themselves to maximize opportunities and results (as in rational choice theory), but often overlooked is the actuality that all people live within a social structure that seeks to inhibit the social mobility of individuals across subgroups, confounding the view of education as a great equalizer. Reardon (2011) analyzed 12 sets of standardized test scores starting in 1960 and ending in 2007 and found that (ceteris paribus) over the nearly 50-year time span, the achievement gap by income had grown by 40% and that the racial/ethnic gap was still significant, but shrinking. Students with the same preparation and test scores should theoretically have access to the same opportunities, but in practice, there is more going on in the decision to attend postsecondary education and persist. With that said, it is not sufficient to look only at the cost-benefit analysis of a choice

without investigating the nature of, motivation for, and other intrinsic factors that contribute to any decision, including whether or not a student decides to persist in higher education. Sociological theory suggests that individuals may not precisely estimate their probabilities of success; individuals' behaviors may be based on the perceived probabilities, given their capital and circumstances rather than the statistical, objective possibilities (Bourdieu & Passeron, 1990).

Therefore, the conceptual framework for this study will focus on Bourdieu's (1973, 1984, 1986, 1993) theory of social reproduction as a means to measure the complexity in student persistence, including how student- and institutional-level characteristics contribute to degree attainment. Pierre Bourdieu, a leading sociologist in structural theory, argued that all human action takes place within the societal structure, which in turn regulates an individual's place in society (Bourdieu, 1984, 1986; Bourdieu & Passeron, 1990). Expectations and aspirations are determined by one's place in society as well as how society validates and legitimizes different capital. Bourdieu characterized any valuable resource as a potential source of capital with value defined in relation to elements of the same system in binary representation. This allows for an understanding of how resources (economic and noneconomic) are directed towards maximizing gains in capital and position in the structure.

Bourdieu (1993) focused much of his attention on the field of higher education as an arena that mirrors the principles operating in society as a whole. Higher education is structured in hierarchy with agents and institutions occupying dominant and subordinate positions. The position one holds is determined by the field-specific resources (capital) and an individual's subconscious dispositions and expectations (habitus). In higher education, the capital operating in the field of a college or university is an institutionalized form of capital. Institutionalized capital gained through degree attainment, which can then be converted into economic capital (i.e., gainful employment) is the outcome measure of interest.

The field of a college or university and the capital valued in that specific field has been perpetuated and recreated over the course of centuries, which has shaped a distinct culture of the academy. Institutionalized capital in the form of credentials and academic capital in the form of knowledge and renown are two types of cultural capital valued in higher education (Bourdieu & Passeron, 1990). A review of organizational culture and subsequent socialization seeks to contextualize how individuals interact with and react to such cultures.

Cultural Socialization

Like any organization, institutions of higher education create and perpetuate their own unique cultures whereby individuals must learn to work within the constraints of the culture or fail to integrate which, according to Tinto (1975, 1993), increases the probability of dropout. On a macro level, the culture of a community college is very different from the culture of a public, 4-year institution; therefore, different methods of conceptualizing persistence are warranted.

Organizational culture is defined broadly in terms of the rules, language, or ideologies that govern and shape the everyday experiences of group members and are the product of observed actions and consequences, which result in shared organizational beliefs and assumptions (Ouchi & Wilkins, 1985; Schein, 1992; Tierney, 1988, 1997; Van Maanen & Schein, 1979). Culture is the product of a continual induction and molding of new members to ensure that they adopt cultural expectations and values. According to Van Maanen and Schein (1979), it is through acculturation that members learn how to navigate the system, what to aspire to, and how to interact. This includes providing the models for appropriate social etiquette and demeanor, as well as guidance for how members "relate to colleagues, subordinates, superiors, and outsiders" (Van Maanen & Schein, 1979, p. 2).

Schein (1992) promoted the use a of broad meaning of culture, a culture that includes not only the rituals and customs created over time, but also the often hidden and complex tacit assumptions of a group. Schein articulated the meaning of culture as:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 12)

Organizational culture is dynamic and continually shaped by the people within and surrounding the organization and it is reflected in the more concrete expressions of rituals, traditions, and history. Culture not only shapes the members of a group, but is in turn shaped by those members.

Culture is the most difficult organizational attribute to change as it is embedded within the fabric of the organization (Schein, 1992). Of all the substances that comprise an organizational culture, tacit assumptions are the most difficult to pin down and the most elusive because they are often hidden and exist outside of the consciousness of the organization (Schein, 1992). According to Tierney (1988), these assumptions may be translated via "stories, special language, norms, institutional ideology, and attitudes" (p. 4). However, Tierney (1988) asserted that it is only after individual members violate the established "codes and conventions" that the power of these assumptions emerges. These systems have the potential to exclude members who are not part of the majority thereby producing and reproducing a culture that maintains hegemonic systems of power, authority, and bases of knowledge.

Learning the attributes and attitudes that comprise an organizational culture comprises the socialization process. Being "socially integrated" refers to the extent to which an individual has accepted group norms and is accepted by the group (Weidman, 1987). Likewise, a culture is considered stable when its members are integrated; integrated members lead to an established culture. Weidman (1987) posited that during college, undergraduates experience four kinds of socialization: anticipatory, formal, informal, and personal. The level of socialization increases with the amount of time spent in an institution. During anticipatory socialization, students adopt the values and orientations of a group to which they do not yet belong. This could be socializing individuals through major choice, experiences, and relationships to prepare for graduation and career choice. Formal socialization occurs when an individual meets the specific demands of the group and is faced with normative pressures. Informal socialization takes place when an individual learns the tacit assumptions of the group and adapts behavior to conform to the norms. This is done through social relationships, involvement in the college community, and support of noncollege reference groups. Finally, once the individual has reconciled their formal and informal organizational expectations with their own values, beliefs, and orientations, full participation in the culture is achieved and the individual can then help shape new members of the group. Students who enter and graduate from the same institution may be more integrated into the college than students who transfer and have less time to integrate by virtue of the amount of time spent

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experiencing the four types of socialization.

In the upcoming years, higher education at all levels will experience soaring enrollments, particularly community college enrollment and the subsequent transfer of these students to 4-year schools (Aud et al., 2012). New members who do not resemble the traditional undergraduate will need to find ways to integrate into the culture of academia and slowly transform what it means to be a college student by shaping and being shaped by the organizational culture, cautious not to reproduce structures that seek to perpetuate existing systems and social strata that exclude nondominant groups.

Social Reproduction

In order to gain acceptance into a culture that is foreign, a certain level of academic, economic, cultural, social, and symbolic capital are necessary (Bourdieu, 1984; Swartz, 1997). Involvement, integration, and engagement are all observable actions that stem from the acquisition of capital and socialization into cultural systems. Bourdieu asserted that there is a direct linkage between culture, social structure, and action (Swartz, 1997). The crux of Bourdieu's theory is that social structure is maintained and reproduced by society at all levels based on capital. The main element of influence is economic capital followed by cultural capital, and Bourdieu argued that one type of capital may be translated into alternative forms of capital when needed. As a society, the value placed on certain types of capital varies, dependent on the field, which creates a stratified social system that maintains and reinforces society's hierarchical nature.

There is difficulty in operationalizing Bourdieu's (1973, 1984, 1986) theory because so many elements interact with one another to determine how "integrated" a

student is within an institution, but it does illuminate the social inequities that exist and are embedded within our educational system. Melguizo (2011) acknowledged the difficulties in applying such a complex conceptual apparatus to student persistence, but posited that quantitative researchers should develop a method to measure the complex relationships that affect student degree attainment and how this relationship is enacted in society. To begin the conversation, it is essential to understand the basic tenets of Bourdieu's theory.

Capital, habitus, and field are brought together in a relational framework that explains how an individual interacts with an institution and why an institutional field and its culture are so durable and pervasive (Bourdieu, 1973, 1984, 1986; Bourdieu & Passeron, 1990; Swartz, 1997). Bourdieu viewed capital as accumulated labor where each type of capital embodies a different amount of labor. The four main types of labor include "economic capital (money and property), cultural capital (cultural goods and services including educational credentials), social capital (acquaintances and networks), and symbolic capital (legitimation)" (Swartz, 1997, p. 74).

Capital. Economic capital is the most well-known of all capital types and is at the root of all other forms. Economic capital is more universally understood across societies and is easier to quantify (e.g., assets, cash, and property). Although Bourdieu disagreed with the reduction of all capital to economic capital, he did see other forms of capital as "transformed, disguised forms of economic capital" (Swartz, 1997, p. 80). Acquisition of capital in any form can be seen as acquisition of power as all capital can be used to establish or maintain a place in the social hierarchy. Economic capital is the most direct means of attaining higher status in society as it is immediately recognizable

and valued across fields, but cultural, social, and symbolic capital are needed to legitimize one's status.

Cultural capital covers "verbal facility, general cultural awareness, aesthetic preferences, information about the school system, and educational credentials" and "can become a power resource" (Swartz, 1997, p. 75). Cultural capital exists in three different states: embodied, objectified, and institutionalized. The embodied state of cultural capital begins in early childhood, sensitizing individuals to cultural distinctions and "translates original class-based inequalities into cultural differences" (Swartz, 1997, p. 76). The embodied state is the accumulation and cultivation of skills, abilities, and attitudes passed on intergenerationally. The objectified state is most concerned with objects that convey access to cultural capital such as books and artwork. The institutionalized form is based in the educational credentialing system, which includes degrees, diplomas, and access to institutions of higher education. Bourdieu placed importance on the expansion of the educational credentialing system and described it as:

[E]ssential for parents to invest in a good education for their children so they can reap the 'profit' on the job market. This process of investment involves the conversion of economic capital into cultural capital, which is a strategy more readily available to the affluent. (Swartz, 1997, pp. 76-77)

Of the three forms of cultural capital, the institutionalized form offers individuals of all social classifications access to additional cultural capital. In contrast, embodied or objectified capital require adherence to norming attitudes, beliefs, and values fostered from birth. There are minute differences between someone who was born understanding certain knowledge and cultural acquisitions and one who gained cultural capital by attaining educational or technical credentials.

Social and symbolic capitals act as subcategories of cultural capital. Social

capital emphasizes the importance of social networks, acquaintances, and connections. Bourdieu defined the concept as the aggregate of the actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition (Bourdieu, 1986, p. 251). Tinto (1975, 1993) and Astin (1993, 1999) maintained that students benefit from and are more likely to be retained by being involved and integrating into the educational system. Bourdieu (1984) would see these positive consequences of sociability as a direct result of the power gained through the attainment of social capital. Gaining preferential treatment from knowing or cooperating with individuals and groups is how social capital gains power. Individuals savvy in the area of maximizing social interactions are more successful at gaining increased social capital and maintaining social status. The size of the network that can be mobilized and the volume of capital (economic, cultural, or symbolic) possessed by the collective determines the volume of social capital power held by an individual (Bourdieu, 1986). Social capital is never truly independent of other forms of capital as its source of power is entirely based on relational connections and the value placed on those connections.

Symbolic capital pertains to accumulated prestige, honor, and cultural mechanisms for legitimation. It can be imparted to an individual or group due to acts, general capital wealth (of all types), or through positions of authority, which all provide distinctions between groups and a system to rank individuals. For example, Bourdieu (1986) recognized that groups have long been represented by individuals possessing symbolic power: "the *nobiles*, the 'people who are known' and who may speak on behalf of the whole group, represent the whole group, and exercise authority in the name of the

whole group. The noble is the group personified" (p. 253), thus creating and legitimating hierarchies of social distinction. Bourdieu (1984) reasoned that all symbolic systems are created in binary opposition as a classification system built upon inclusion and exclusion. The function of symbolic capital is to legitimize social stratification and differentiation among groups by assigning meaning and value to certain forms of resources.

Habitus. Habitus can be defined as a deep structuring of the cultural system of dispositions, thoughts, appreciations, and principles that organize practices and create subconscious cultural and mental schemata that result from early socialization to the external structures (Bourdieu, 1984; Bourdieu & Passeron, 1990; Swartz, 1997). It is within the habitus that individuals gain access to social and cultural capital. Habitus contributes to the perception of opportunities available to individuals who internalize aspirations and expectations which in turn are externalized into actions that tend to be self-fulfilling prophecies—perpetuating the existing social order. Habitus can be read as a way of "conceptualizing culture as practice" and simultaneously as associating "practice to habit" (Swartz, 1997, p. 115).

Field. Field is a social arena where agents are located within a certain social position jockeying for power and capital. Bourdieu defined field as:

a network, or configuration, of objective relations between positions. These positions are objectively defined, in their existence and in the determinations they impose upon their occupants, agents, or institutions, by their present and potential situation (*situs*) in the structure of the distribution of species of power (or capital) whose possession commands access to the specific profits that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology, etc.). (Bourdieu & Wacquant, 1992, p. 97)

Fields are arenas of struggle for legitimation and control over valued resources (Swartz, 1997). The field of power is the most pervasive and operates throughout all fields and can be thought of as the realm of the dominant social class. The educational field, for

example, is situated within the overarching field of power that draws distinctions between levels of economic and cultural capital.

An individual can have academic capital, but still fall within a dominated position in the overall hierarchy. If we consider Bourdieu's (1984) theory in four quadrants (see Figure 1), the four quadrants make up the larger field of power. Within the field of power are smaller fields. For instance, the field on the left side in its own demarcated space represents the field of higher education teachers and artistic producers where the dominant players may be different, but are still situated within the larger field of power. According to Swartz (1997), "fields are to be viewed as systems in which each particular element (institution, organization, group, or individual) derives its distinctive properties from its relationship to all other elements" (p. 123). In addition to the relational nature of the field, three additional notions need to be considered when examining a field (Swartz, 1997). First, fields must be looked at from the underlying structures, not through commonsense categorizing, to understand the invisible structures that shape action. Secondly, class background, milieu, or contexts are mediated through fields. Finally, attention must be paid to the social conditions of struggle that shape cultural production.

Linking Bourdieu to Student Departure

At the intersection of the key concepts of habitus, field, and capital is what Bourdieu (1984) defined as observable action. Bourdieu (1984, p. 101) offered the following equation as a summary of his formula :

[(habitus)(capital)] + field = practice.

He stressed the importance of remembering that practice grows out of the interrelationship of habitus and capital in relation to the field of power. When





researching issues of practice, there is a need to identify the relations between opposing positions and understand the capital valued in the field under investigation. To fully understand the practice of individuals, it is imperative to locate the dominant and subordinate positions for all participants in the field. In the case of student persistence, consideration for all the agents in the field (dominant and subordinate positions) and the capital that each participant holds creates a deeper understanding of why students leave college.

Students at community colleges who wish to transfer to a public, 4-year school, have situated themselves within one field (community college) and gained capital based on the value placed on that particular system. When transferring, the difference between the field of a community college and the public, 4-year field may create cognitive dissonance: suddenly, students who achieved a certain level of capital and developed a habitus aligned with the community college system find themselves in a new environment (field) that does not value community college capital. Further, a student's habitus may not align well with the new institution, resulting in their departure from the system. Nora (2004) described habitus as the fit between a student's values and beliefs and the academic environment, and argued that habitus plays a major role in whether a student feels a sense of belonging and satisfaction regardless of academic record or institutional selectivity. Habitus is one area over which the institution has the most control; this is where students gain access to social and cultural capital and decide whether or not they "fit" with the institution. Intentionally creating an environment that welcomes students and is inclusive of all populations can lead to higher levels of persistence (practice) (Nora, 2004).

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Research Questions

This study explores the issue of community college-to-university transfer and subsequent graduation. Persistence and retention studies generally pertain to only the traditional college student. In contrast, this study seeks to look deeper into how issues of capital, habitus, and field affect students' graduation. More specifically, the following questions guide this study:

- RQ1: Is there a significant difference between the bachelor's degree completion rates of transfer and native students from public 4-year institutions?
- RQ2: How do chances of bachelor's degree graduation change when factoring in capital for transfer and native students?
- RQ3: Does the likelihood of graduating with a bachelor's degree change when adding the effect of habitus?
- RQ4: To what extent does the field in conjunction with capital and habitus change the likelihood of graduation?

Summary

Education is understood by many to be a means to better one's social and economic standing and achieve greater equality. Ideally, each individual who chooses to pursue an education has the opportunity to achieve the greatest potential possible, but in practice, the system may not function quite so perfectly. When habitus, field, and capital are considered, an individual's chances and opportunities are determined in part by objective structures and how individuals internalize these structures as well as an individual's position in the field of power. Bourdieu (1984) stressed the idea that an individual's station is predetermined, but that an individual with lower access to capital may perceive opportunities and possibilities differently.

Access to postsecondary education for underrepresented groups and low-income individuals has grown, but little attention has been paid to the hierarchical nature of the educational system in the United States. Carnegie classifications and ranking systems have ordered postsecondary education institutions with very high research, doctoralgranting institutions at the top and associate-degree granting institutions at the bottom. Because the field at each institution values different capital, the differences between the types and how classification, size, and selectivity affect a student's decision to persist all make up the field of inquiry.

Transfer students, in particular, need to acquire cultural capital that is not accessible in the community college environment. Introducing and familiarizing students with the receiving institution's environment and expectations early on may lessen the shock that students experience after transferring. Socialization, according to Weidman (1987), is an ongoing process where students enter college with personal values, goals, and aspirations; are exposed to socializing influences; assess the salience of normative pressures for attaining goals; and change or maintain the values, goals, and aspirations held at the beginning of the college experience. Transfer students develop a set of schemata (habitus) in the community college system to help understand what is possible and what opportunities are available. Moving out of that system and reorganizing one's habitus to meet the new socializing influences and normative pressures involved in transferring to a new institution may cause students, who are otherwise capable of succeeding academically, to feel out of place and unwelcome. These students then drop

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out, thus perpetuating the social hierarchy.

Knowing that inequities exist in the structure of higher education suggests that more than changing policies and institutional practices is needed to increase degree attainment rates for students in higher education. An overhaul of the structure at a macro level and shifts in valued cultural competencies may be necessary to meet completion goals. Cultural shifts occur over an extended period of time, and the culture of higher education has been preserved over centuries, so it may take longer than the year 2020 to reach the completion goal if meaningful and sustainable changes in degree attainment are to be achieved.

CHAPTER II

LITERATURE REVIEW

Student persistence, whether at 4-year or 2-year schools, has become a common performance indicator in higher education (Ewell, 1998) and has been linked to student learning and satisfaction (Astin, 1993; Pascarella & Terenzini, 2005). In addition, retention has been shown to be highly correlated with academic, personal, and social outcomes (Carini et al., 2006; Kuh, 2003; Kuh et al., 2010, 1997; Pascarella & Terenzini, 2005; Pike & Kuh, 2005). Students are half as likely to persist to bachelor's degree completion if they start their education at a community college versus starting and finishing at public, 4-year schools (Cohen & Brawer, 2008; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Pascarella & Terenzini, 2005; Snyder & Dillow, 2010). The problem lies in a paucity of research that examines bachelor degree attainment of students who start at community colleges on a national level. Research in this area is long overdue.

The American Association of Community Colleges (2010) reported that from fall 2007 to fall 2010, there was an estimated enrollment increase of 16.9% in community college students nationwide (6.8 million to 8 million) and that nearly half of all undergraduates are community college students. With this growing student population, the need to further examine engagement behaviors to improve student success in the 2-year sector is critical. Marti (2009) found that there is a need for research that replicates
findings from 4-year institutions and he found at least three major differences between the two sectors: "community colleges serve extensive developmental educational needs, there is often a wider range of educational programs than are offered at four-year institutions, and measures of student success in two-year institutions are less straightforward" (p. 17). This study recognized that there are indeed many differences between 2- and 4-year schools in terms of the needs of the students served, programs offered, and institutional mission. At the same time, there is much to learn about how students who start at community colleges and obtain a bachelor's degree experience the transition process and successfully navigate a new system compared to students who start and finish at a 4-year institution.

If the assumption is made that institutions value different types of culture, then each institution creates a hierarchical structure unique to its own field. Students who plan to transfer to a 4-year institution from a 2-year contend with the change in structure, values, and ideas about what it takes to be considered a "member." The principal theoretical proposition of Bourdieu is that "every power which manages to impose meanings and to impose them as legitimate by concealing the power relations which are the basis of its force, adds its own specifically symbolic force to those power relations" (Bourdieu & Passeron, 1990, p. 4). In other words, the dominant class ascribes value to attitudes and resources, which are in turn legitimized by both the dominant and subordinate classes as the way things naturally are. Accepting the dominant patterns of thought and not questioning the legitimacy of the system in place reinforces, sustains, and perpetuates the existing social order.

This literature review explores the theoretical framework of social reproduction

by Pierre Bourdieu in relation to the persistent problem of lower educational attainment of students who start postsecondary education at community colleges and subsequently transfer to a public, 4-year institution. For context, the review outlines a brief overview, history, and role of 2-year public institutions. The next section provides a review of research in higher education generated from Bourdieu's framework and how social reproduction theory creates inequity in the opportunity structure.

Role of Community Colleges

The community college system was developed in the early 20th century as a means to provide access to a collegiate education during a time when the percentage of students entering college increased from just 5% in 1910 to nearly 50% in 1960 (Cohen & Brawer, 2008). With such a great increase in the number of students entering postsecondary education, there was an increased need to train workers in expanding industries, increased belief in social mobility through education, and greater demands placed on education at all levels (Cohen & Brawer, 2008). The definition of a community college has changed since its inception as a "junior college" offering lowerdivision coursework through a university branch in separate facilities to what Cohen and Brawer (2008) defined as, "any institution regionally accredited to award the associate in arts or the associate in science as its highest degree" (p. 5). Initially, the idea was that the role of a university was to provide high-quality education through research and professional development and the "lower level" learning of general education and vocational training should be relegated to community colleges. This differentiation of and attitude towards educational hierarchy persists today.

Even with uncertainty surrounding the role of public community colleges,

enrollment has soared with nearly half of all students in higher education enrolled in community colleges (Snyder & Dillow, 2010). Where universities aimed to focus on research and scholarship, community colleges capitalized on their multiple roles and comprehensive mission to adapt to the changing needs of their communities. One of the primary functions of the community college is to provide open-access, college-level education to students who desire a lower cost alternative to traditional 4-year schools. Additional roles include vocational preparation, remediation, community education, and workforce development that mirrors the needs of the communities served. For many students, community college provides the education needed to transfer to a 4-year school. This comprehensive mission has led to the enrollment of a wide diversity of students.

Students enter community colleges at different levels of academic preparedness, including those who are underprepared and need remediation to high achieving, high school students completing associate degrees. The rate of students requiring remedial coursework has steadily increased in the last 30 years, reaching 61.1 % in 2008 (College Board, 2008). Although the purpose of remedial education is to prepare students for college-level coursework and assist them in moving forward with their education, the College Board suggested that "developmental (remedial) courses in 2-year colleges seem to be a graveyard for degree aspirations" (p. 12). For example, according to Venezia, Bracco, and Nodine, (2010), only 25% of students who are required to take remedial reading courses in community college ever move to a transfer-level English course and only 10% of students taking a remedial math class ever advance to a college-level course. If students are not prepared for college-level courses upon entry to community college, finishing any type of degree becomes more difficult.

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The role of the institution in navigating the needs of so many constituents is important and often overlooked. In a study examining the 4-year perspective of institutional policies and practices, the College Board found that many institutions are concerned about persistence and graduation, but too few resources are devoted to these efforts, which are not always grounded in empirical research (2009). The same study focused on benchmarking policies at 4-year institutions and stated that "[an] indicator of an institution's commitment to improving student success is its consistency in tracking persistence and graduation rates as well as its efforts in assessing programmatic interventions" (p. 7). However, transfer students are not mentioned in any of the benchmarks.

Transfer students are generally not included in institutional retention rates at 2year or 4-year institutions, but student movement between institutions is no longer a rare occurrence. This movement forces institutions to rethink the way persistence and retention are conceptualized. The National Student Clearinghouse Research Center (2012) found that 45% of all students who completed a degree at a 4-year institution during the 2010-2011 academic year had previously enrolled in at least one 2-year institution. The study also found that more than one in five students who completed a degree did so at an institution other than the one where they started and that 15% of 2year starters completed a degree at a 4-year institution within 6 years, and nearly twothirds of those did so without first obtaining a 2-year degree.

Administrative Policies

Students starting at a community college who intend to transfer to a public, fouryear school are often unaware of many administrative policies and procedures. However, these policies and procedures are fundamental in ensuring student success. These policies and practices included the handling of transfer credit and articulation agreements (Poisel & Joseph, 2011; Townsend & Wilson, 2006).

Transfer credit. Traditionally, colleges and universities have had a high level of autonomy with regard to transfer credit acceptance and articulation. When a student starts the transfer process, an official transcript is sent to the receiving institution, which evaluates the courses taken and decides how the credits should be applied based on comparability, rigor, and length. The subjectivity involved often means that students who transfer may take longer to graduate if their coursework is not applied to the degree program sought. To improve transfer rates and success, many states have intervened to create state-mandated policies regarding the acceptance of transfer credit, but the gaps in bachelor's degree attainment between native and transfer students still exist (Cutright, 2011).

The College Board (2011) found that when working with transfer students, receiving institutions need to prepare for three challenges: evaluating the transfer students' application files, assessing students' preparation for major coursework, and determining educational fit. Coursework needs to be carefully and meticulously evaluated to ensure that all credits transferred are appropriately applied. The second challenge, preparation for major coursework, is determined through success in prerequisite coursework, general education, and/or overall grade point average. This assumes that a student who does well in lower division courses is prepared to succeed in upper division coursework at a new institution in a new environment. Building on that idea, the need to evaluate for institutional fit is an area that The College Board finds

critical in the transfer admissions process. For a student who has fewer years than a native student to integrate and engage with the new institution, the need for "fit" is increasingly important.

Articulation. Articulation agreements describe how credits transfer from one institution to another. Transferring credit and having that credit applied to a degree are two distinct concepts, both of which students are unfamiliar with. Regionally accredited institutions accept college-level credit from other regionally accredited institutions, but if the credit is not applied in a meaningful way (e.g., clearing prerequisites or major requirements), transfer students may end up with "extra" credits, above and beyond the requirements for a degree. Cutright (2011) described the grounds of not applying coursework to a degree as "trivial as the use of a different (but quality) textbook, a different break point between two sequential courses, or an untested assumption of inadequate rigor." He continued, "unless the university offers a major in electives, semesters and years of actual progress toward a degree can be lost" (p. 7).

Articulation policies act as contracts between institutions to accept and apply credit, but the agreements are in constant states of flux as universities modify or remove lower division coursework in favor of nontransferable upper division classes which must be taken at the 4-year school (Poisel & Joseph, 2011). As a student, the need to constantly advocate for oneself and be up-to-date on the changing policy landscape is vital to an efficient and smooth transfer.

Students are advised to be in contact with transfer representatives to understand the transfer process and the current articulation agreements. Students who are not in contact with transfer representatives from the 4-year school may end up choosing courses

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based on a series of "educated" guesses (College Board, 2011). Educated guesses may cost time and money for students most at-risk for not completing a 4-year degree. Although institutional polices attempt to create a structured system to assist students in the transfer process, many students who are unfamiliar with the system may lack the cultural capital needed to successfully transfer depending on levels of preparedness, socioeconomic backgrounds, and demographic characteristics.

Profile of Today's College Student

The composition of today's college population is continuing to shift. In fall 2013, total undergraduate enrollment in degree-granting postsecondary institutions was 17.5 million students (10.5 million enrolled in 4-year institutions and 7.0 million at 2-year institutions), an increase of 46% from 1990, when enrollment was 12.0 million students. While total undergraduate enrollment increased by 37% between 2000 and 2010, enrollment in 2013 was 3% lower than in 2010 (National Center for Educational Statistics, 2014). Along with overall increases in the number of students attending higher education, community colleges are experiencing some of the largest enrollment increases. Between 2013 and 2024, enrollment at 2-year institutions is projected to increase by 15%, to 8.0 million students, while enrollment at 4-year institutions is projected to increase by 11%, to 11.6 million students (National Center for Educational Statistics, 2014). Many community college students differ from traditional university students in age, gender, socioeconomic status, and race/ethnicity (Gildersleeve, 2010). With the combination of low-cost, open admissions policies and diverse programming, community colleges continue to see the largest concentration of students who are not considered traditional.

Sixty-one percent of all community college students are women (National Center for Educational Statistics, 2012). At 4-year institutions, that number drops slightly to 57%. Literature on the persistence of women in higher education is sparse, even though women make up the majority of enrollment at postsecondary institutions. However, women still do not earn as much as men, even with the same education. At every degree level, young adult males had higher median earnings in 2010 than young adult females with the same levels of education (Aud et al., 2012). In 2010, the percentage of degrees earned by females was 62% for associate's degrees and 58% for bachelor's degrees (Aud et al., 2012). Within each racial/ethnic group, women earned the majority of degrees at all levels in 2010. For example, Black females earned 68% of associate's degrees and 66% of bachelor's degrees awarded to Black students and Hispanic females earned 62% of associate's degrees, and 61% of bachelor's degrees awarded to Hispanic students.

Students of color are among the fastest growing populations in the country with the lowest levels of educational attainment (J. M. Lee & Ransom, 2011). According to Chronicle Research Services, by 2020 students of color will make up a majority of the college-going population for the first time (Van Der Werf & Sabatier, 2009). To meet the Presidential degree attainment goal of 55%, the degree attainment gap between students of color and White students must be eliminated. The overall percentage of students of color in the postsecondary system has steadily increased in the past couple of decades and the community college sector (as of fall 2007) was made up of the following racial/ethnic composition: 14% Black, 15% Hispanic, 7% Asian/Pacific Islander, 1% Native Indian, 2% more than one race (Snyder & Dillow, 2010).

When looking at engagement levels, Greene, Marti, and McClenney (2008) found

that African American and Hispanic students reported higher levels of engagement and lower academic outcomes when compared to their White counterparts. This study highlights what the researchers call the "effort-outcome gap" among African-American and Hispanic students in community colleges (Greene, Marti, & McClenney, 2008): they report higher levels of engagement; nevertheless, academic performance is still lower for these two groups than that of their White peers. Although performance was lower, similar studies that controlled for institutional characteristics and precollege preparation found that African-American students were just as likely to persist to graduation as White students (Small & Winship, 2007).

In addition to gender and race/ethnicity, the population of adult students is changing the landscape of college campuses. Adult students, as defined by the National Center for Educational Statistics, had to meet at least one of the following characteristics: delays enrollment (does not enter postsecondary education in the same calendar year in which they finished high school); attends part time for at least part of the academic year; works full time (35 hr or more per week) while enrolled; is considered financially independent for purposes of determining eligibility for financial aid; has dependents other than a spouse (usually children, but sometimes others); is a single parent (either not married or married but separated and has dependents); or does not have a high school diploma (Choy, 2002). Choy found that three quarters of all students in 2000 had at least one adult student characteristic, and observed that if participants were even minimally nontraditional, the odds of attending a 2-year school increased and that the most concentrated numbers of adult students were enrolled in public 2-year institutions (2002).

Deil-Amen and Rosenbaum (2003) found that adult students in community

colleges face obstacles stemming from a lack of "social know-how." The obstacles for adult students include bureaucratic hurdles, confusing choices, student-initiated guidance, limited counselor availability, poor advice from staff, slow detection of costly mistakes, and poor handling of conflicting demands. If students were provided with information regarding how to access this cultural and social capital from the onset, they might be better prepared to encounter similar obstacles when transferring to a baccalaureate institution (Deil-Amen & Rosenbaum, 2003; Jones, 2010; Poisel & Joseph, 2011). The implicit rules that require capital can be transformed into explicit organizational structures and policies, thus eliminating the need for a priori knowledge of the institutional environment.

Pascarella and Terenzini (2005) suggested that "community colleges divert opportunity rather than democratize it" and that because those served are disproportionately working-class, lower-middle-class, and often from racial-ethnic minority groups, this institution that sought to provide access to students may actually preserve and reproduce the stratified, hierarchical social system (p. 375). These researchers also concluded that students who do successfully transfer to a 4-year school often resemble their counterparts who initially enroll at a 4-year institution and are more likely to come from higher socioeconomic brackets; be younger, White, and male; have been on track in high school; have higher degree expectations; attend school during the day; be more academically and socially integrated in the institutions from which they are transferring; and have been continuously enrolled (Cohen & Brawer, 2008; Nora, Cabrera, Hagedorn, & Pascarella, 1996; Pascarella & Terenzini, 2005). Based on this information, knowing who transfers, who is successful, and what may prevent others who indicate intent to pursue a bachelor's degree but do not, may uncover the invisible structures that reproduce existing hierarchies within the higher education system. Revealing who persists and who does not creates an opportunity for modification.

As outlined previously, there is a need to understand class background, milieu, and the contexts that are mediated through fields. A clear picture of students who transfer and the characteristics that shape their habitus is essential when viewing how an individual's social condition shapes practice. As the makeup of the student population continues to evolve, institutions, too, must evolve to meet the changing needs of the students they serve. To understand and prevent student attrition, institutions have looked to retention theories as a way to solve the student departure problem.

Retention theories have provided a strong foundation for understanding student retention, but the problem of student departure continues. The focus has been on students or institutions, but the interrelatedness of the two requires further attention. To begin the conversation, a discussion of how capital has been perceived in higher education and how social reproduction theory has been utilized will guide the discussion.

Capital Valuation in Higher Education

Social reproduction theory is gaining ground in the social sciences as a means to explore the inequities that exist in social systems, including higher education. Capital, once thought of as a purely economic resource, has become a multidimensional concept which includes economic, cultural, social, and symbolic capital (Bourdieu, 1986). The educational system held a central place in Bourdieu's work because he saw it as the primary institution controlling and allocating power, privilege, and capital (Swartz, 1997). Habitus affects the selection process with regard to education because ambitions and expectations arise from early class socialization and the internalization of perceived opportunities. This self-selection affects whether or not an individual will attend postsecondary education as well as type (e.g., sector, selectivity, and cost). Swartz (1997) described the process well when he said:

Working-class youth do not aspire to high levels of educational attainment because, according to Bourdieu, they have resigned themselves to the limited opportunities for school success that exist for those without much cultural capital. In contrast, upper-middle-class youth internalize their social advantages as expectation for academic success, and stay in school. (p. 197)

Lower class students either lack the understanding and information required to deliberate college options or exclude themselves from the system entirely due to financial risk or not fitting in (Ball, Davies, David, & Reay, 2002). The intersection of habitus and capital lead to the decisions to attend higher education, which institution to attend, choice of major, and whether or not to persist to graduation.

In higher education research, McDonough (1994) utilized the concept of capital to explain college choice and institutional admissions practices. She was able to discern differences in college choice behavior based on economic affluence and found that low-SES students and schools do not participate in the rigorous, personalized college choice process that high-SES students and schools do due to limited financial resources and habitus. McDonough's study exposed the reciprocal influences of institutional and individual action through the use of Bourdieu's framework.

Capital and habitus are separate, but influence one another in a given field that ultimately leads to practice. The analogy of a card game illustrates this point more concretely: "Players are dealt different cards (e.g., social and cultural capital), but the outcome is dependent on not only the cards…but the skills in which individuals play their cards. Depending on their 'investment patterns,' individuals can realize different amounts of social profits from relatively similar social and cultural resources" (Lamont & Lareau, 1988, p. 154). Capital alone is not sufficient. Dispositions, knowledge, and expectations that correspond to valued ideals in a field assist in taking full advantage of the power afforded to higher status individuals.

Berger (2000) indicated that through Bourdieu's framework, it is assumed that individuals from similar backgrounds share a common understanding about the world and that because of the commonality shared, experience the environment in similar ways. Likewise, individuals who do not share a common understanding may experience the same phenomena differently, which precludes some students from integrating into an unfamiliar environment. Swartz (1997) articulated that for Bourdieu, the educational system privileges certain cultural heritages while penalizing others such that exposure to university instruction does not fully compensate for the lack of capital for lower and middle-income youth. He continued, "traditional programs of humanist studies, which until recently dominated the preparatory track for entrance to the university and elite professional schools in France, does not provide the technical skills needed in the broadest sectors of the job market" (Swartz, 1997, p. 199). In practice, then, individuals self-select institutions and programs of study that share similar types of capital and reflect a similar habitus.

Institutions that are highly selective are considered to have high organizational cultural capital, and include private, large public universities, and major research universities (Berger, 2000). Conversely, community colleges and less selective colleges are thought to have less organizational cultural capital. Attrition, according to Berger (2000), is relative to the selectivity of an institution; institutions with high selectivity

attract students with high capital and high motivation to persist, whereas less selective institutions attract students who are not as knowledgeable about the education process and may not be as committed to completing degrees.

Berger (2000, pp 113-117) articulated four propositions that can be used to test a social reproduction perspective on individual persistence:

- 1. Institutions with higher levels of cultural capital will have the highest retention rates.
- 2. Students with higher levels of cultural capital are more likely to persist, across all types of institutions, than are students with less access to capital.
- 3. Students with higher levels of cultural capital are most likely to persist at institutions with correspondingly high levels of organizational cultural capital.
- Students with access to lower levels of cultural capital are most likely to persist at institutions with correspondingly low levels of organizational capital.

What the above propositions suggest is that persistence and retention research needs to look at both individual-level as well as institutional factors that contribute to or inhibit student success and that the persistence process is different at different institutions and experienced differently by students who have varying levels of capital and congruence with institutional habitus.

Overall, the field of higher education is an arena where agents vie for access to capital of all types. Defining and identifying how each type of capital affects higher education can lead to a greater understanding of the role students and institutions play in the persistence process. The ensuing section focuses on illustrating the use of capital in higher education research, specifically, looking at economic, cultural, social, and symbolic capital and how they relate to habitus and field.

Economic Capital

Economic capital is a form of capital that can be directly converted into money (Bourdieu, 1986; Paulsen & St. John, 2002). Economic capital can be measured in part by socioeconomic status, but socioeconomic status also includes parents' education and occupational status, making it unclear what variable is responsible for which effect (Paulsen & St. John, 2002). In higher education, commitment of the availability of financial aid may function as a supplement for access to readily available economic capital (Heller, 2006). Availability of aid may influence students' decisions of which institution to attend by reducing concerns about college cost, thereby making institutions with higher levels of cultural capital seem more accessible. Access to higher education regardless of financial status has been the topic of many federal policies aimed at opening doors to higher education regardless of ability to pay.

The signing of the Higher Education Act of 1965 brought hope for many students that federal support in the form of funding would increase access to and opportunities in higher education for all students regardless of financial status. Lyndon B. Johnson, upon signing the act stated, "[The Higher Education Act of 1965] means that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 States and not be turned away because his family is poor" (Ficklen & Stone, 2002, p. iii). Today, federal support is still available, but has shifted from grant money to funding in the form of student loans. Financial barriers still present challenges to lowand middle-income students, many of whom worry about rising tuition costs, daunting student loan debt, and lack of information about aid amounts and availability (Dynarski, 1999, 2000). To make matters worse, the 2008 national recession made the prospect of work, postcollege graduation, even more uncertain.

Although the Higher Education Act was intended to increase access to postsecondary education for students from all socioeconomic circumstances, in practice, it may inequitably distribute access dependent on institutional type and selectivity. In a study of transfer access from community college to elite institutions, Dowd, Cheslock, and Melguizo (2008) found that family affluence clearly affects enrollment of students at elite institutions where less than 10% of students at elite institutions are from low socioeconomic backgrounds. The researchers noted that substantial intergenerational mobility becomes more difficult when a source of movement in the social hierarchy is determined in part by earnings and educational credentials from highly selective institutions. The researchers confirm what Bourdieu already knew: capital alone is not enough. Even with changes in federal policy to subsidize tuition costs for qualified students, students from low socioeconomic backgrounds are still not transferring from community colleges to elite institutions.

Gaddis (2012) argued that the lack of familiarity with the dominant culture (cultural capital) leads to disparities not consistent with the dominant group that can be a barrier to the upward mobility of low-SES individuals. Adelman (2006) found that the lowest SES individuals often attended high schools that were also less likely to offer higher level academic offerings, which also led to lower levels of degree attainment. Low-SES individuals are at a disadvantage due to a lack of capital, but if they can tap into resources to alleviate the lack of immediate economic capital through grants and loans as well as other capital types, they will be better equipped to navigate the educational system and interact with educational gatekeepers.

First-generation students are often overrepresented in other areas of disadvantaged populations including gender, racial/ethnic, and socioeconomic status. Lohfink and Paulsen (2005) found that in these intersecting sites of oppression firstgeneration, Hispanic, lower-income, or female students were at highest risk of dropping out. They also found that students from higher income families who were familiar with information about college were at less risk of leaving college than their counterparts. Coupled with the knowledge that first-generation students are more likely to enroll in community college, this becomes a sector that necessitates further investigation. Firstgeneration status immediately signals that the student lacks the intergenerational knowledge and attitudes associated with cultural capital. With the lack of cultural capital, first-generation students also lack the expectation and disposition to attend and graduate from college.

First-generation student status has been shown to have a negative association with students' overall academic preparation and persistence due to various factors such as: completing fewer credits, taking fewer academic courses in high school, earning lower grades, needing more remedial assistance, and being more likely to withdraw from or repeat attempted courses (Chen, 2005). Furthermore, first-generation students are more likely to enroll in postsecondary education part-time, and to attend public 2-year institutions, private, and for-profit institutions than their continuing-generation counterparts (Nunez & Cuccaro-Alamin, 1998).

In Bourdieu's (1986, 1993; Swartz, 1997) theory, all capital stems from and can

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be converted into economic capital. It is the primary mechanism and marker of social mobility. As such, it creates a unique disadvantage for those individuals who do not have access to it. In the past, it was easier for individuals to access higher education through grant aid and scholarships; the current shift to loans as a primary source of funding for qualified individuals may provide access to higher education, but not the immediate economic payoff. Students who do not have immediate access to economic capital must rely on attaining and utilizing other forms of capital with the expectation that they will be able to translate other forms of capital into an economic payoff and upward social mobility.

Cultural Capital

Cultural capital has been defined as resources or goods that are transmitted from generation to generation among a specific social class to maintain and transmit social norms (Bourdieu, 1984). While studies have operationalized Bourdieu's concept of cultural capital as participation in or appreciation of high culture (Bourdieu, 1984, 1986; Dumais & Ward, 2010), as that was a primary area of research for Bourdieu himself, this view is limited in that it only measures the objectified state of cultural capital. The current study is most concerned with the institutionalized state of cultural capital as measured through degree attainment as well as the embodied state of cultural capital that refers to manifestations of appreciations of cultural goods and resources.

The embodied state of cultural capital consists of both the consciously acquired and the passively "inherited" properties of one's self. It is not enough to simply acquire objects that are valued; embodied capital is also required in order to appreciate objectified cultural capital. Bourdieu (1973) argued that although it may seem like students are rewarded based on academic talents and abilities, they may actually be rewarded based on attainment of embodied cultural capital. As an example, students possessing cultural capital are more likely to receive attention from teachers, better grades, and more encouragement to pursue higher education (Dumais & Ward, 2010). Attainment of cultural capital has been positively associated with educational outcomes; in particular, grades (Dumais, 2002), test scores (Eitle & Eitle, 2002), college enrollment (Kane, 2011; Rivera, 2011; Turley, Santos, & Ceja, 2007; Zimdars, Sullivan, & Heath, 2009), and graduate school attendance (Walpole, 2003).

Walpole (2003) researched the effect of socioeconomic status on college experiences of students and found that students from low socioeconomic backgrounds possessed differing levels of cultural capital than students from high socioeconomic backgrounds. She argued that although students from low socioeconomic backgrounds did indeed experience greater social mobility than that of their parents, they still did not reach the advantages of high socioeconomic background students; low socioeconomic status students experience lower incomes, graduate school attendance, and educational attainment than their peers (Walpole, 2003). From a cultural capital perspective, socioeconomic status is passed down through generations, making parental degree attainment a central focus of cultural capital. Reaching parity in achievement does not necessarily equate to parity in advancement.

Parents with college educations may value postsecondary degree attainment more than parents who do not, and may possess the skills and knowledge to help their own children navigate the process of entering college and attaining a degree. Evidence suggests that parental education is a strong predictor of students' dispositions towards

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college (Bergerson, 2009; Hamrick & Stage, 2004). Students' dispositions can be shaped through parental involvement, influence, encouragement, and support (Hossler, Schmit, & Vesper, 1999). Hossler and colleagues (1999) identified influence as sending explicit signals, encouragement reflected in parent-child discussions about expectations and plans, and support in parental backing. These results suggest that students from lower socioeconomic backgrounds with parents who cannot provide the same levels of involvement, encouragement, or backing have to excel academically and look to other forms of capital to support their higher education aspirations.

Social Capital

Social capital represents the social networks, connections, and acquaintances with key players who have access to other types of capital. Social capital is the "sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu & Wacquant, 1992, p. 119). Stanton-Salazar (2011) maintained that working-class students of color experienced differential access to social capital, which he defined as resources and support of institutional agents. Stephens, Townsend, Markus, and Phillips (2012) discussed the cultural mismatch first-generation students have in higher education in general as they typically have a more difficult time adjusting to college due to academic and/or economic resource deficiency. These researchers articulated that a culture of "independence" that aligned with the habitus of the dominant class permeated higher education (e.g., pave your own path, express yourself). Working-class and middle-class individuals were found to adopt and value a more "interdependent" context (e.g., being part of a community, working with

others). This mismatch of values led to an aversive psychological state. This aversive state decreased when more interdependent practices were included in the institutional framework. Including practices that value interdependent contexts may moderate the effects of lack of economic capital and increase the cultural and social capital valued.

The sooner students can start building social capital and access to support from institutional agents, the sooner they can access that capital. For example, community colleges are responsible for engaging students in the community college environment and preparing students for transfer, but often students are not introduced to the 4-year environment until it is time to transfer and lack the social networks that native students have already had the opportunity to establish. Once students transfer, the receiving institution is responsible for orienting, advising, and providing support systems (Braxton & McClendon, 2001; Townsend & Wilson, 2006), but that may be too late for students to form meaningful social networks that will sustain them through graduation.

Social capital and building social networks also impact underrepresented students in relation to familiarity with complicated college application and financial aid processes. The Advisory Committee on Student Financial Assistance (2008) found that "millions of community college students who appear to be eligible for need-based financial aid are not applying" (p. i). King (2006) reported that approximately 55% of community college students never complete the FAFSA and many of them may have been eligible to receive aid. Where access to funding may be a stumbling point for many students, access to social networks adept at simplifying the process could help students find alternate paths to encouragement, funding, and support.

Symbolic Capital

Symbolic capital relates closely to habitus as symbolic capital distinguishes between dominant and nondominant groups and individuals through the use of assigning meaning and value throughout the hierarchical structure. Thus, symbolic capital is defined through its function of mediating power through prestige, and can consist of economic, social, or cultural capital (Bourdieu, 1986). Any form of capital that is seen as legitimate can be construed as symbolic capital. Particularly, institutionalized cultural capital in the form of educational credentials inherently possesses symbolic capital relative to the educational system's reputation and status in society as a whole.

Research focused on symbolic capital is severely limited. Although Bourdieu (1986) outlines symbolic capital as a separate form of capital, research has not operationalized this form as separate from the others. Harker (1984) contended that symbolic capital interdepends on habitus, "the possession of the appropriate habitus then constitutes a form of *symbolic capital* which acts as a multiplier of the productivity of educational capital (qualifications)" (p. 119). Appropriate habitus consists of the dispositions and expectations valued and rewarded in society.

Habitus and Field

Dispositions and expectations are developed through socialization in homes, families, and other social arenas. Individuals internalize and develop parameters of what is possible and generate perceptions that correspond to the structuring properties of the class system (Swartz, 1997). These ideas and expectations are understood as habitus. Habitus negotiates between objective structures and practices and shapes our understanding of ourselves and the world around us (Bourdieu, 1977, 1986; Bourdieu & Passeron, 1990). Grenfell (2010) found that habitus encompasses the observable actions and decisions made in relation to the field of power and capital accumulation. He continued:

We are faced at any moment with a variety of possible forks in that path, or choices or action and beliefs. This range of choices depends on our current context (the position we occupy in a particular field), but at the same time which of these choices are visible to us and which we do not see as possible are the result of our past journey, for our experiences have helped shape our vision. Which choices we choose to make, therefore, depends on the range of options available at that moment (thanks to our current context), the range of options visible to us, and on our dispositions (habitus), and the embodied experiences of our journey. (p. 52)

An individual's habitus is dynamic and molded through experiences and location in the field of power and capital. It represents "a system of lasting, transposable dispositions which, integrating past experiences and actions, functions at every moment as a matrix of perceptions, appreciations, and actions" (Bourdieu, 1973, p. 83). The interlocking and complex nature of capital, habitus, and field create an environment that is accepted and reproduced through unconscious submission, through which Bourdieu asserts that subordinate classes are forced to adjust expectations due to lack of capital and power in the field (Bourdieu, 1984).

Students' expectations of higher education often influence their choice of academic discipline as they typically seek to align their degree program with their perceived abilities, interests, and personality (Pike, 2006). Arguably, these same expectations influence students' choice of which institution to attend and level of possible degree attainment. Although few studies have examined habitus in conjunction with capital, those that have operationalized it as future aspirations or expectations (Dumais, 2002; McClelland, 1990; Reay, 2004).

Nora (2004) examined the role of habitus and capital in college choice and persistence. He found that habitus is what students use to inform and validate their decisions and that student satisfaction is due to the "complex interplay" between personal and institutional factors: psycho-social factors were more influential in the college-choice process than high school grades and preparation and that institutional fit was the most important institutional factor. Bergerson (2007) mirrored Nora's (2004) findings in that psycho-social factors and institutional fit played a critical role in the student's decision to choose a particular institution as well as the choice to leave the institution. In Bergerson's case study, Anna (low-SES, first-generation, female, of Hispanic origin, and rural background) made the decision to attend a semiselective, private college, away from home based on a campus visit and access to scholarship monies. During her first semester, she felt like she did not fit in. Unlike her peers, she had to work in order to fund her college expenses, which kept her from taking part in college engagement opportunities and she felt isolated from her peers as well as friends and family and ultimately left the institution. In line with Nora's (2004) study, "this fitting-in factor extends beyond matching academic credentials with institutional attributes and includes positive personal and social feeling that facilitate social interactions and relationships with other students and faculty" (pp. 199-200). Anna did not feel accepted or part of her institution, which led to her decision to leave college and return home where she felt accepted and supported (Bergerson, 2007). In Nora's (2004) study, feeling personally accepted was found to have twice the predictive power of reenrollment as any other college choice factors.

Expectations, aspirations, and capital determine in large part the field in which

individuals choose to operate as well as potential success. Understanding the capital valued by the institution and how that value aligns with an individual's own habitus makes it possible to recognize the hierarchically structured nature of the educational system. Public 2-year and 4-year institutions exist within the larger field of higher education where the very mission of the public 2-year institution of open-access supposes a more subordinate position in the field of power. Within each institution, there also exist dominant and dominated positions occupied by students in the system.

Summary

Community colleges serve the most diverse populations of students under a variety of missions. For students hoping to transfer to 4-year institutions, knowledge of the services available to transfer students, policies surrounding the transfer of credit, and an understanding of how the mission of an institution affects the culture and environment of a college or university may help in the transition process (Townsend & Wilson, 2006).

Students' situated contexts that are shaped by their capital influence their collegechoice and persistence decisions. As noted, the forms of capital are interrelated, with blurry distinctions in some cases. While habitus interacts with capital within a given context to generate college-choice practice (Swartz, 1997), it may play a more fundamental role in dispositions and skill in using capital to generate gain.

Adding the concept of habitus to forms of capital draws on the existence of individual agency within structural constraints and explains the inequity in the opportunity structure of higher education. Moreover, knowing how student characteristics (capital and habitus) contribute to and interact with institutional attributes (field) may help guide researchers to a more complex understanding of the reasons behind college student dropout. The purpose of the current study is to understand the relationship between institutions, students, and graduation rates. This study aims to understand the likelihood of graduation for students and uncover policies and practices at the institutional level that may be hindering degree attainment for students.

CHAPTER III

METHODOLOGY

In the previous sections, an introduction to the proposed area of research was presented. This included a description of the study's research problem and several research questions that will serve to direct the data analysis. In addition, a review of relevant literature described the major variables in the study—institutional-level and student characteristics. Both student-level and institutional-level variables have been studied extensively, but not together nor with a focus on transfer students and how capital (or lack thereof) may contribute to student departure. This section describes the methodology proposed for such a research effort. Included in this section are a description of the data set used, the research design, study procedures, and analysis efforts.

Studies of capital have been critiqued for constructing assumptions around a deficit perspective of capital in which underrepresented communities are viewed as places of cultural poverty (Yosso, 2005). In response, the present study seeks to offer a perspective of institutional deficiency, acknowledging and recognizing the various capitals that diverse students bring to the college experience and suggesting alternatives for how institutional policy and programming can be transformed to create environments that value and reflect the unique students who enter and graduate from educational systems. Often, quantitative research is criticized for its lack of a critical lens. Stage (2007) argued that critical questions can be answered using quantitative techniques that "push the boundaries of what we know by questioning mainstream notions of higher education through the examination of policies, the reframing of theories and measures, and the reexamination of traditional questions for nontraditional populations (p. 5). Stage (2007) emphasized the importance of choosing research questions that illuminate conflict and biases rather than confirm conventional wisdoms and consensus. By digging deeper into traditional theories of student departure, the current study seeks to move beyond the often positivist approach of quantitative research and evoke a critical perspective to understand degree completion rates for students dependent on capital accumulation, habitus, and field.

In preliminary descriptive statistical analyses, 81.4% of students who started at a public 2-year school expected to earn a bachelor's degree or higher, but 6 years later, only 11.6% of students who started at a 2-year school had attained a bachelor's degree. For students who started at a 4-year school, 98.5% expected to earn a bachelor's degree or higher when first surveyed in 2003, and in the final follow up in 2009, nearly 60% had attained a bachelor's degree. This comparison illustrates that improvements need to be made in the 4-year sector, but the 2-year sector requires immediate attention if the nation is to reach the Presidential completion goal. Only 14.4% of students who started at a 2-year school obtained an associate's degree. Too few students are obtaining bachelor's degrees than expected and even fewer students who start at a 2-year institution are obtaining the associate's degree or certificate (see Tables 1 and 2).

	No degree	Associate's degree	Bachelor's degree	Post- BA	Master's degree	Doctoral or prof degree	Total
	(%)	(%)	(%)	(%)	(%)	(%)	
Public							
4-year	0.2663	1.2204	26.0767	0.7917	45.9505	25.6943	100%
Public							
2-year	4.0166	14.5817	37.2839	0.1933	31.4414	12.4832	100%
Source: U	J.S. Departn	nent of Educa	tion, Nationa	l Center	for Education	on Statistics,	BPS:2009

Table 1 Highest Degree Ever Expected 2003-04 by First Institution Sector (2003-04)

Beginning Postsecondary Students

Table 2

Attainment or Level of Last Institution Enrolled Through 2009

	Attained	Attained	Attained	No	No degree,	No	Total
	bachelor's	associate's	certificate	degree,	enrolled at	degree,	
	degree	degree		enrolled	less-than-4-	not	
				at 4-	year	enrolled	
				year			
	(%)	(%)	(%)	(%)	(%)	(%)	
Public							
4-year	59.4988	3.7893	1.5595	9.7387	3.1656	22.2481	100%
Public							
2-year	11.5679	14.4056	8.4688	6.6976	12.8543	46.0058	100%
Source: U.S. Department of Education National Center for Education Statistics							

Source: U.S. Department of Education, National Center for Education Statistics, **BPS:2009 Beginning Postsecondary Students**

Data Source

The Beginning Postsecondary Longitudinal Survey (BPS) and the Integrated Postsecondary Education Data System (IPEDS) serve as the data sources for this study.

The BPS surveyed cohorts of first-time, beginning students at three points in time: the

end of their 1st year, and then 3 and 6 years after first enrolling in postsecondary

education. It collected national data on a variety of topics, including student

demographics, school and work experiences, persistence, transfer, and degree attainment.

These topics make BPS an appropriate choice for answering the research questions.

IPEDS gathers institutional-level data from every college and university that participates in federal financial aid programs. The advantage of utilizing the two data sets is that both student-level and institutional-level data can be compared to inform the study around the differential impacts the two levels can have on students' decisions to persist. The 2009 IPEDS data were used to correlate with the last interview data collected from the BPS survey.

Sample Selection

The 2003:2009 BPS surveys included a total of 16,100 students, but only students who began their postsecondary education at either a 2-year or 4-year public institution were included in the sample for this study. Students who attend other institutional types were excluded as they were not the focus of the current study, although future research building on the present study in other institutional types may garner interesting results. The sample size for each of the analyses included 3,063 students who began higher education at a public 4-year institution and never transferred and 3,646 students who began higher education at a public 2-year institution and transferred a maximum of one time to a public 4-year institution. Native students are considered students who began at the same institution and never transferred.

Variable Selection

The purpose of this study was to determine the variables that predict the likelihood of students graduating with a bachelor's degree. The three categories of variables that were examined represent: a) capital, b) habitus, and c) field. The

independent variables for economic capital included Pell Grant eligibility, parents' level of education, and hours worked per week. The independent variables included for cultural capital were high school GPA and AP credits earned. The independent variables for social capital include frequencies for the number of informal faculty meetings, speaking with faculty members outside of class, meeting with an academic advisor, attending clubs, and participating in study groups that were combined into an academic integration index. To measure habitus, the variable for highest degree ever expected when entering postsecondary education in 2003 was used. Lastly, the study controlled for demographic variables such as age, race/ethnicity, and gender. The institutional-level variable included institutional sector to measure field. The dependent variable was degree attainment (see Table 3).

Research Questions and Hypotheses

The first research question asks, Is there a significant difference between the bachelor's degree completion rates of transfer and native students? Based on previous research, it was hypothesized that degree completion rate is higher for students who begin their education at public, 4-year schools and never transfer. Descriptive statistics reviewed the empty model and a one-way analysis of variance (ANOVA) determined whether there was a significant difference.

Research question two asks, How do chances of graduation change when factoring in capital? This question moves beyond looking at graduation rates to specifically examine the binomial outcome of bachelor degree graduation. Logistic regression analysis allowed for the examination of many independent variables and their strength of influence on a binary dependent variable (Creswell, 2005; Field, 2009).

Name	Variable	Description	Source
Age	AGE	Indicates respondent's age as of	NPSAS:04
		12/31/2003	student
			interview
White	RACECEN	Indicates respondent's race-ethnicity	NPSAS:04
			student
			interview
Male	GENDER	Indicates the respondent's gender	NPSAS:04
			student
			interview
Not a Pell	PELLDEP	Indicates whether the respondent	NPSAS:04
recipient		received a Pell grant for the	student
		2003-2004 academic year and their	interview
		dependency status.	
Parent(s)	PAREDUC	Indicates the highest level of education	NPSAS:04
earned a		of either parent of the respondent during	student
degree		the 2003-2004 academic year.	interview,
			CPS:04
Work	JOBENR	Indicates the intensity of work while	NPSAS:04
Status		enrolled during the 2003-2004 academic	student
		year.	interview
HS GPA	HCGPAREP	Indicates the high school grade point	College Board,
		average on the standardized test date,	ACT
		according to self-report on test	
		questionnaire.	
AP Credits	CRDAP04	Indicates whether the respondent had	NPSAS:04
Earned		advanced placement (AP) credits that	student
		were accepted by the school when first enrolled.	interview
Academic	ACINX06	This variable indexes the overall level	BPS:04/06
Integration		of academic integration the respondent	student
Index		experienced at the most recent	interview
		institution attended.	
Academic	HIGHLVEX	Indicates the highest level of education	NPSAS:04
Aspirations		that the respondent ever expected to	student
		complete.	interview
Field	SECTOR	First institution sector (level & control)	BPS: 04/06
		2003-04	student
			interview
Bachelor	PROUT6	Cumulative persistence and attainment	BPS:04/06/09
Degree		anywhere through the end of academic	student
Attainment		year 2008-2009.	interview

Table 3Description and Source of Variables Selected

Many variables contribute to capital. Understanding how each type of capital (economic, social, and cultural) impacts an individual's chances of graduation is a key component of Bourdieu's theory. Logistic regression was used to address this question. This model included measures of capital to predict the likelihood of graduating with a degree:

$$\operatorname{logit}(p_d) = \ln\left(\frac{p_d}{1 - p_d}\right) = \beta_0 + \beta_1 * (CAP)_i + \varepsilon_i$$
[1]

In this equation, p is the probability of a student attaining a bachelor's degree, $ln(\frac{p}{1-p})$ is the natural logarithm of the odds of p, and subscript i denotes the student. The dependent variable in question is degree attainment. *CAP* represents the vector of variables that represent cultural, economic, and social capital. It was hypothesized that capital would have a significant influence on graduation for students, regardless of institution(s) attended.

The third research question builds on the previous question by adding variables that address habitus. This model introduces the constructs of habitus and field and measures the additional variance explained:

$$\operatorname{logit}(p_d) = \ln\left(\frac{p_d}{1-p_d}\right) = \beta_0 + \beta_1 * (CAP)_i + \beta_2 * (HAB)_i + \varepsilon_i$$
[2]

In this equation, p is the probability of a student attaining a bachelor's degree, $ln(\frac{p}{1-p})$ is the natural logarithm of the odds of p, and subscript i denotes the student. The dependent variable in question is degree attainment. *CAP* represents the vector of variables that represent cultural, economic, and social capital and *HAB* represents habitus (e.g., degree expectations). The final research question (to what extent is the institutional sector related to graduation?) utilized multilevel logistic regression to assess the effect of institutionallevel and student-level characteristics on the likelihood of graduating with a bachelor's degree. Since students are nested within institutions, a hierarchical logistic model was used as in previous studies using BPS survey data (Carter, 1999; Porter, 2005; Titus, 2006). Given the nested structure of the study, a hierarchical model led to more rigorous results (Tabachnick & Fidell, 2006). Specifically, multilevel models examined the present study's cross-level hypothesis that the likelihood of graduating with a bachelor's degree varies by both individual-level characteristics in addition to institutional-level variables. Secondly, if nested data structures are not treated as such, the possibility of violating the assumption of independence of errors increases, thereby potentially including autocorrelated or intraclasscorrelated data. Because multilevel models handle multiple levels of data simultaneously, they adjust for this violated assumption (Raudenbush & Bryk, 2002).

It was hypothesized that student-level and institutional-factors each contribute to student graduation rates. By partitioning the variance among student-level and institution-level variables, a multilevel model offered advantages over traditional singlelevel ordinary least squares (OLS) regression design. The multilevel model was expressed in the following equation, where level one represents the student-level and level two represents the institution-level variables.

Level 1: logit
$$(p_{ij}) = ln\left(\frac{p_{ij}}{1-p_{ij}}\right) = \beta_{0j} + \beta_{1j} * (CAP)_{ij} + \beta_{2j} * (HAB)_{ij} + \varepsilon_i$$
 [3]

Level 2:
$$\beta_{0i} = \gamma_{00} + \gamma_{01} * (SECTOR) + \mu_{0i}$$

where subscript *j* denotes the institution and β_{oj} denotes the average graduation rate for a particular institution. γ_{00} represents the grand mean for graduation rates for all institutions, and parameter estimates by institutional sector (*SECTOR*), which represents the field of power.

Model Specification

The construction of a complete model that accurately specifies the relationships that constitute the link between the predictors and the dependent variable was the ultimate goal of this study; however, in practice, model specification is never that clear. The use of existing theory has aided in the identification of the variables to include in the study, but other factors may need to be taken in to account.

After running the logistic regression equations, it was found that there were variables included that were not significant; these were removed for the parsimony of the model as a whole. The inclusion of irrelevant variables, or overfitting of the model, did not lead to biased estimates, although it did lead to inefficient standard errors (overall higher variance). In addition to checking the relevance of each variable, examining the functional form for misspecification was tested.

To check for functional form misspecification, polynomials of the fitted values of the original regression equation are added to the equation to detect misspecification (RESET test). Although the test only indicates whether or not the model suffers from misspecification of this kind (but not where), it is helpful to begin modifying the model if needed prior to analyzing the final output to ensure proper examination of the outcome variable.

Variable Reduction and Model Trimming

Initially, there were 14 variables at the student and institutional level. After reviewing collinearity and the variance inflation factor (VIF) statistics, it was found that a number of variables did not contribute to model fit and were represented by other variables in the model. For example, receiving a Pell grant reported high collinearity with income level; therefore, income level was eliminated from the analysis. Eliminated variables included income level, institutional selectivity, high school type, and ACT score. In the subsequent modeling, these variables were dropped from the analysis and a total of 11 variables were used (see Table 4).

Descriptive Statistics

Stata Release 12 (Stata Corp., 2011) was used to calculate student and institutional level descriptive statistics. Descriptive statistics serve as a tool for describing and summarizing the properties of an otherwise unwieldy mass of data (Glass & Hopkins, 2008). The descriptive statistics for the variables used in the model utilizing the mean, standard deviation, minimum, and maximum values as described below (Table 5). The variables for race/ethnicity, Pell Grant recipient, parent level of education, work status, HS GPA, as well as field were coded 0 or 1 with the reference category being the variable name. The majority of students (78.4% who started at a 2-year and 98.8% who started at a 4-year) expected to receive a bachelor's degree or higher upon entering higher education. Of these, only 17.6% of students who started at a 2-year institution received at least a bachelor's degree after 6 years compared to 75.6% of students who started their college education at a public 4-year institution.
inst. Degree work GPA First institution 1.000 1.000 Errst institution 1.000 White 0.092 1.000 1.000 Errst institution 1.000 Age -0.206 -0.011 1.000 Errst institution Errst institution Age -0.206 -0.011 1.000 Errst institution Errst institution No Pell 0.120 0.279 -0.055 0.269 1.000 Parent Degree 0.252 0.136 -0.112 0.078 0.269 Not working 0.281 -0.056 -0.078 0.269 1.000 HS GPA 0.335 0.093 -0.112 -0.076 0.101 1.000 AP 0.209 0.037 -0.085 -0.011 0.072 0.143 0.114 1.000		First	White	Age	Male	No Pell	Parent	No	HS	AP	Acad.	Expect
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Not working 0.281 -0.056 -0.084 0.046 -0.026 0.101 1.000 HS GPA 0.335 0.093 -0.112 -0.076 0.072 0.143 0.114 1.000 AP 0.209 0.037 -0.085 -0.001 0.072 0.156 0.087 0.172 1.000	Parent Degree	0.252	0.136	-0.112	0.078	0.269	1.000					
HS GPA 0.335 0.093 -0.112 -0.076 0.072 0.143 0.114 1.000 AP 0.209 0.037 -0.085 -0.001 0.072 0.156 0.087 0.172 1.000	Not working	0.281	-0.056	-0.084	0.046	-0.026	0.101	1.000				
AP 0.209 0.037 -0.085 -0.001 0.072 0.156 0.087 0.172 1.000	HS GPA	0.335	0.093	-0.112	-0.076	0.072	0.143	0.114	1.000			
	AP	0.209	0.037	-0.085	-0.001	0.072	0.156	0.087	0.172	1.000		
Academic Index 0.193 -0.019 -0.083 -0.041 0.012 0.074 0.103 0.101 0.060	Academic Index	0.193	-0.019	-0.083	-0.041	0.012	0.074	0.103	0.101	0.060	1.000	
Expect BA 0.257 -0.037 -0.139 0.010 0.057 0.148 0.080 0.131 0.083	Expect BA	0.257	-0.037	-0.139	0.010	0.057	0.148	0.080	0.131	0.083	0.116	1.000

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Table 5Descriptive Statistics

Variable Name	Mean	SD	Min	Max
Dependent Variable				
Received bachelor's degree	0.41	0.49	0	1
Level-1 Variables				
Age	21.39	7.37	15	71
White	0.67	0.47	0	1
Male	0.43	0.49	0	1
Not a Pell recipient	0.69	0.46	0	1
Parent(s) earned a degree	0.41	0.49	0	1
Work Status				
No work	0.37	0.48	0	1
High School Preparation				
HS GPA (3.0-4.0=1)	0.70	0.46	0	1
AP credits earned	0.20	0.40	0	1
Academic Integration				
Academic Integration Index	85.79	44.10	0	200
Academic Aspirations				
Expect Bachelor's Degree	0.89	0.32	0	1
Level-2 Variables				
Sector	0.46	0.50	0	1

Approximately half of students in the sample started college at a public 2-year school (50.81%). The majority of students were female, White, and in their early 20s.

Economic capital was measured by whether a student received a Pell Grant and work status. Cultural capital was measured by whether either parent received a bachelor's degree or higher, students' earned AP credits while in high school, and average high school GPA. Academic integration indexes the overall level of academic integration the respondent experienced at the most recent institution attended. It is derived from the average of the responses indicating how often he or she did the following: had social contact with faculty, talked with faculty about academic matters outside of class, met with an academic advisor, or participated in study groups. The Academic Integration index was used to measure social capital. For habitus, academic aspirations for whether or not a student expected to receive a bachelor's degree or higher was measured. Field looked at the institutional type. Institutional type included public 2-year and public 4-year institutions. Differences in the capital variables for students who started at a public 2-year or a public 4-year institution are described in Table 6.

Centering Techniques at the Student Level (Level 1)

All variables at level one were centered on the group mean. Group mean centering is particularly useful when the interest of a study is disentangling effects and the student and institutional levels and does not change the interpretation given to β_{0j} , even when working with dummy variables (Raudenbush & Bryk, 2002). Group-mean centering allows the intercept to represent the log-odds of attaining a bachelor's degree for students who have average characteristics for level-one variables. Thus, the regression coefficient for a variable such as age would be interpreted as the expected difference in the log-odds of attaining a bachelor's degree associated with a one unit increase in age. In the case of dichotomous independent variables, the interpretation for

Table 6

Differences in Capital for 2-year and 4-year Students (as a percentage)

Variable	Public 2-year	Public 4-year
No Pell	64.0	25.3
Parent(s) earned a degree	26.7	57.0
Work Status (No work=1)	27.3	51.1
HSGPA (3.0-4.0=1)	54.4	86.2
AP Credits Earned	11.6	30.7
Academic Integration		
ACAINX=0	6.5	1.2
ACAINDX=25-100	74.3	66.2
ACAINDX=125-200	19.2	32.6

group-mean centering is slightly different. For example, with variables like gender (coded 1 for male) the coefficient takes on the value equal to the proportion of female students, whereas for male students, it takes on this value minus the proportion of female students.

Summary

Students are impacted by their own characteristics as well as the educational environment. By utilizing a multilevel model, the variance can be partitioned at each level demonstrating the effect that each variable has on persistence to graduation. Students may show the same potential for success, but exhibit different outcomes in persistence based on their first institution of choice. If that is found to be true, institutions need to realize the impact they have on students' decisions to persist and modify practices that deter students from graduating.

CHAPTER IV

RESULTS

This chapter presents results, utilizing the methods described in the previous chapter, to answer the research questions posed in this study. A one-way ANOVA was used to answer the first research question followed by a series of multilevel logistic regressions. The research questions of interest are:

- RQ1: Is there a significant difference between the bachelor's degree completion rates of transfer and native students from public 4-year institutions?
- RQ2: How do chances of bachelor's degree attainment change when factoring in economic, social, and cultural capital predictors?
- RQ3: Does the likelihood of graduating with a bachelor's degree change when adding the effect of habitus?
- RQ4: To what extent does the field (institutional characteristics) in conjunction with capital and habitus change the likelihood of graduation?

Each research question, along with results of the analysis conducted, is presented in the following sections.

RQ1: Is There a Significant Difference Between the Bachelor's Degree Completion Rates of Transfer and Native Students From

Public 4-Year Institutions?

The first research question examined bachelor's degree attainment for students who started at a 4-year institution (and never transferred) or started at a community college and transferred to a 4-year school. A one-way ANOVA was conducted to determine whether bachelor's degree attainment differed for students who started at a public 4-year institution versus students who started at a public 2-year. There was a statistically significant difference between groups as determined by one-way ANOVA (F(1, 7442)=4227.97, p<.001). Students who started college at a at a public 4-year institution differed significantly from students who started at a public 2-year institution with regard to bachelor's degree attainment, confirming the hypothesis for research question number one. There is a significant difference between bachelor's degree completion rates of transfer and native students from public 4-year institutions.

The following logistic regressions add complexity to this finding by adding additional variables that contribute to or hinder bachelor's degree attainment for these two groups. The first hierarchical logistic regression was the baseline unconditional model. This was followed by the control model, which added demographic variables to the model. Once the unconditional and control models were fitted, research proceeded building the models that added capital, habitus, and field to answer research questions two through four.

Unconditional and Control Models

Before proceeding with addressing subsequent research questions, a preliminary random-effect ANOVA using the unconditional model was run without predictors to determine if a multilevel analysis was warranted. The log-odds of receiving a bachelor's degree from an average institution ($u_{0j}=0$) is estimated as -0.636. An average institution means the average degree attainment for students in the sample, regardless of institution attended. The intercept for institution *j* is -0.636+ u_{0j} , where the variance of u_{oj} is estimated as $\sigma^2_{u0}= 4.44$. The likelihood ratio test statistic for the null hypothesis that $\tau_{00} = 0$ was significant (LR=2552.51, p<.001). The null hypothesis was rejected—there is strong evidence that the between-institution variance in bachelor's degree attainment is nonzero.

The unconditional model yielded an intraclass correlation coefficient (ICC) of 0.57, signifying that it is estimated that the institutional random effects comprise approximately 57% of the total residual variance with the remaining 43% attributable to individual difference (see Table 7). With the ICC at 57% for the unconditional model, research proceeded to answer research question number one, as an ICC over 20% means that there is a base to continue to model at the institutional level.

Variable Name	Coefficient	SE	Exp(b)
Level-1 Variables			
Constant	-0.636**	0.102	0.530
Level-2 Intercept	4.44	0.420	
Intraclass Correlation	0.575	0.023	
Note: * <i>p</i> <.01, ** <i>p</i> <.001			

Table 7Logistic Regression Results of the Unconditional Model

The control model built on the unconditional model by including student demographic variables: age, gender, and race/ethnicity. Of all of the students surveyed, the average age was 21.39 years old, 67% of respondents were White, and 43% of respondents were male. All of the variables were significant at p<.001 in the control model with a Wald statistic of 166.8 with an *LR*=1679.70, *p*<.001 (see Table 8). For every one unit increase in age, the odds of completing a bachelor degree decreased (odds ratio=0.851) and being male decreased the odds of degree attainment (odds ratio=0.792). On the other hand, being White increased the odds of obtaining a bachelor degree (odds ratio=1.403). When compared to the unconditional model, the intercept β_0 , for the control model is slightly lower: -0.636 in the base-line model to -0.806 in the control model. Students, nested within institutions, were negatively impacted by increases in age, being male, and being a student of color for bachelor's degree attainment. Research proceeded by building on the control model to include independent variables to measure the concept of capital.

Table 8Logistic Regression Analysis for the Control Model (Model 1)

Variable Name	Coefficient	SE	Exp(b)
Level-1 Variables			
Constant	-0.806**	0.096	0.447
Age	-0.162**	0.013	0.851
White	0.338**	0.087	1.403
Male	-0.233**	0.072	0.792
Level-2 Intercept	3.403	0.336	
Note: *p<.01, **p<.001			

RQ2: How Do Chances of Bachelor's Degree Attainment

Change When Factoring in Economic, Social,

and Cultural Capital Predictors?

The second research question looked deeper into the influence of student-level characteristics on the probability of bachelor's degree attainment by adding variables associated with capital. The variables included economic, cultural, and social capital and were selected due to previous research that operationalized Bourdieu's theory of social reproduction and more specifically, capital valuation (Dumais, 2002; Eitle & Eitle, 2002; Ficklen & Stone, 2002; Lohfink & Paulsen, 2005; Paulsen & St. John, 2002; Swartz, 1997). A summary of the logistic regression analysis for variables predicting bachelor's degree attainment, including those that measured capital, is presented in Table 9. All of the covariates have statistically significant effects. The Wald test showed that they are also jointly significant (W=408.39, p<.001) with an LR=417.92 p<.001. The highest magnitude indicators were both variables for high school preparation (HS GPA>3.0 and earning AP credits while in high school). For every one unit increase in age and being male, the likelihood of graduating with a bachelor's degree decreased. The academic integration index, which measures the overall level of academic integration the respondent experienced (how often he/she did the following: had social contact with faculty, talked with faculty about academic matters outside of class, met with an academic advisor, or participated in study groups), only slightly increased a student's probability of obtaining a bachelor's degree. Although still statistically significant, the odds are only slightly greater than one to one. Chances of bachelor's degree attainment did change when factoring in predictors associated with economic, social, and cultural

Variable Name	Coefficient	SE	Exp(b)
Level-1 Variables	**		• • •
Constant	-0.907**	0.065	0.404
Age	-0.274**	0.049	0.761
White	0.367**	0.100	1.444
Male	-0.168*	0.083	0.846
Not a Pell recipient	0.414**	0.097	1.512
Parent(s) earned a degree	0.503**	0.085	1.653
Work Status (Not working=1)	0.593**	0.088	1.810
High School Preparation			
HS GPA (3.0-4.0=1)	1.020**	0.097	2.773
AP credits earned	0.504**	0.103	1.655
Academic Integration Index	0.010**	0.001	1.010
Level-2 Intercept	1.750	0.223	

Table 9 Logistic Regression Analysis Including Predictors of Capital (Model 2)

Note: **p*<.01, ***p*<.001

capital with all predictors of capital increasing a student's chances of obtaining a bachelor's degree.

RQ3: Does the Likelihood of Graduating With a Bachelor's Degree

Change When Adding the Effect of Habitus?

This model introduces the effect of expectations on bachelor degree attainment as measured by whether or not a student expected to earn a bachelor degree or higher when starting at an institution of higher education. Habitus is dynamic and molded through experiences and location in the field of power and is operationalized in this study as students' degree aspirations, consistent with previous research (Dumais, 2002; McClelland, 1990; Reay, 2004). The summary of the logistic regression analysis for variables predicting bachelor's degree attainment, including variables for capital and habitus, is presented below (see Table 10).

All the covariates have statistically significant effects. The Wald test showed that

Variable Name	Coefficient	SE	Exp(b)
Level-1 Variables			
Constant	-0.978	0.162	0.376
Age	-0.255**	0.049	0.775
White	0.411**	0.099	1.508
Male	-0.180*	0.083	0.835
Not a Pell recipient	0.397**	0.097	1.487
Parent(s) earned a degree	0.452**	0.086	1.571
Work Status (Not working=1)	0.598**	0.088	1.818
High School Preparation			
HS GPA (3.0-4.0=1)	0.997**	0.097	2.710
AP credits earned	0.500**	0.103	1.649
Academic Integration Index	0.009**	0.001	1.009
Academic Aspirations	1.937**	0.260	6.939
Level-2 Intercept 1.518	0.201		

Table 10Logistic Regression Analysis Including Predictors of Capital and Habitus (Model 3)

Note: *p<.01, **p<.001

they are also jointly significant (W=450.95, p<.001) with an LR=342.28, p<.001. The model indicated that by adding the academic aspiration of attaining a bachelor degree or higher, the variables representing the constants and capital changed slightly, but habitus (degree expectations), with an odds-ratio of 6.939, was the predictor with the highest magnitude. The likelihood of graduating with a bachelor's degree does change when adding the effect of habitus.

RQ4: To What Extent Does the Field in Conjunction With Capital

and Habitus Change the Likelihood of Graduation?

The fourth and final research question builds on the previous questions by adding field to the equation. Educational sector was chosen to represent the field as public 2year and public 4-year institutions exist within the larger field of higher education. The open-access, public 2-year supposes a subordinate position to the more selective public 4-year institutions serving in the more dominant position in the field of power. This equation added sector to the level two equation (public 2-year=0, public 4-year=1).

All the covariates have statistically significant effects (see Table 11). The Wald test showed that they are also jointly significant (W=908.04, p<.001) with an LR=40.32, p<.001. By adding field to the equation and looking specifically at how sector impacts the equation, results are similar to those found in the previous models. Habitus and field had odds ratios of 5.088 (Academic Aspirations) and 7.779 (started at a public 4-year); the largest magnitude of all the predictors in the model. Students who aspired to attain a bachelor's degree were 5.088 times more likely to attain that degree, surpassed only by students who started at a 4-year school as opposed to students who started at a public 2-year institution and were 7.779 times more likely to complete a bachelor's degree. The

Table 11

Logistic Regression Analysis for Variables Predicting Bachelor's Degree Attainment Including Predictors of Capital, Habitus, and Field

Variable Name	Coefficient	SE	Exp(b)
Level-1 Variables			
Constant	-0.938**	0.150	0.391
Age	-0.206**	0.049	0.814
White	0.396**	0.094	1.486
Male	-0.222*	0.082	0.801
Not a Pell recipient	0.360**	0.094	1.434
Parent(s) earned a degree	0.383**	0.084	1.466
Work Status (Not working=1)	0.448**	0.086	1.565
High School Preparation			
HS GPA (3.0-4.0=1)	0.816**	0.095	2.262
AP credits earned	0.426**	0.100	1.531
Academic Integration Index	0.008**	0.001	1.008
Academic Aspirations	1.627**	0.253	5.088
Field (Pub4Yr=1)	2.051**	0.106	7.779
Level-2			
Intercept	0.350	0.085	
Note: * <i>p</i> <.01, ** <i>p</i> <.001			

odds ratios displayed in Table 12 demonstrate the magnitude of the variables associated with degree attainment. All variables were statistically significant at p<0.001 with the exception of gender, which was significant at p<.0. Habitus and field are the two variables with the highest odds ratios of all the variables studied.

With the addition of field, the picture of degree attainment is more complete. Starting at a 4-year institution with the academic aspirations of attaining a bachelor's degree or higher were the predictors with the highest odds ratio for earning a bachelor's degree. With each added unit of age, the likelihood of attaining a bachelor's degree decreased approximately 18.6%. The probability of attaining a bachelor's degree for being male decreased approximately 19.9%. Not being a Pell Grant recipient and having at least one parent who completed a bachelor's degree or higher, which correspond to

Variable Name	Control	Model 2	Model 3	Model 4
Level-1 Variables				
Constant	0.447**	0.404**	0.376**	0.391**
Age	0.851**	0.761**	0.775**	0.814**
White	1.403**	1.444**	1.508**	1.486**
Male	0.792*	0.846*	0.835*	0.801*
Not a Pell recipient		1.512**	1.487**	1.434**
Parent(s) earned a		1.653**	1.571**	1.466**
degree				
Work Status (Unemployed=1)		1.810**	1.818**	1.565**
High School Preparation				
HS GPA (3.0-4.0=1)		2.773**	2.710**	2.262**
AP credits earned		1.655**	1.649**	1.531**
Academic Integration Index		1.010**	1.009**	1.008**
Academic Aspirations			6.939**	5.088**
Field (Pub4Yr=1)				7.779**
Level-2 Random Effects Parameters				
UnitID: Intercept	0.886	1.750	1.518	0.350
Note: * <i>p</i> <.01, ** <i>p</i> <.001				

Table 12Odds Ratios for Logistic Regression Analyses

indicators of economic capital, were found to increase the likelihood of a student completing a bachelor's degree. Students who did not work while working towards a degree were also found to have a higher likelihood of degree attainment than students who worked full- or even part-time. Surprisingly, much of the research on retention points to academic integration and engagement as predictors of degree attainment (Astin, 1999; Berger & Braxton, 1998; Pascarella & Terenzini, 2005; Tinto, 1993), but the variable for student engagement, academic integration, although statistically significant, remained at an odds ratio of 1.01 across all models. The academic integration index measured the level of involvement students reported through the following: social contact with faculty, talking with faculty about academic matters outside of class, meeting with an academic advisor, or participating in study groups.

When introducing the variable for field into the model, the odds ratios for other predictor variables changed slightly, but students who started at a public 4-year institution were still 7.779 times more likely to complete a bachelor's degree than students who started at a 2-year public institution when factoring in other variables related to capital and habitus.

Summary

This chapter sought to determine the variables that contribute to a higher probability of bachelor degree attainment by looking at capital, habitus, and field. Taking advantage of the nested nature of the data, four models were conducted using hierarchical logistic modeling, starting with the unconditional model as a base model to inquire whether there was a significant amount of variance at the institutional level. After confirming that there was a significant amount of variance at the institutional level, the control model was conducted with controls for first institution type attended, age, gender, and race/ethnicity. The succeeding model included variables to measure capital followed by a model including habitus, and finally the full model, which added field.

The results of the study are consistent with prior research related to degree attainment and demographic and economic, social, and cultural capital (Aud et al., 2012; Deil-Amen & Rosenbaum, 2003; Gildersleeve, 2010; Lee & Ransom, 2011; Snyder & Dillow, 2010; Van Der Werf & Sabatier, 2009). Of particular interest is the odds ratio of degree attainment for sector, which included students who started at a public 2-year institution versus a public 4-year institution (7.779). Sector was followed in magnitude by academic aspirations (5.088) and then capital in importance (varied).

In an era when institutions of all sectors need to rethink how students are supported through graduation, special attention to those students who need additional resources can be seen through this research. Older, non-White, male, Pell Grant recipients who work and may not be as academically prepared need additional resources to reach graduation. These findings, conclusions, and recommendations are discussed in the following chapter.

CHAPTER V

DISCUSSION

Following a brief overview of the purpose and methodology, this chapter summarizes key findings from the results of the study, including explanations and conclusions based on the framework of the study. Generally, results of this study indicate consistency with Bourdieu's (Bourdieu, 1977, 1993; Bourdieu & Passeron, 1990; Swartz, 1997) theoretical concept of capital, habitus, and field as well as its predictability of the educational achievement patterns of students in higher education. The chapter concludes with implications for policy and practice and recommendations for further research related to degree attainment for students at public 2-year or public 4-year institutions.

Purpose

Educational attainment continues to play a critical role in the political context, global competitiveness, and as a means to fight social inequities (Carnevale et al., 2010; Lee & Bowen, 2006; Mills & Gale, 2007). Understanding the role that community colleges continue to play in the landscape of degree attainment is critical to the success of students within the educational system as well as ultimately meeting the goal of the completion agenda. The purpose of this study was to explore the dimensions of persistence and degree attainment at both the student and institutional levels. Many students are choosing to enter higher education at community college with the expectation of earning a bachelor degree, but students who begin their education at a community college are less likely than their peers who start at a public 4-year institution to earn their anticipated degree. Adding variables that address capital, habitus, and field demonstrates the complexity of the issue at hand.

Bourdieu (1993) looked at higher education as an arena that mirrors society as a whole. Within that arena, the interaction between capital, habitus, and field demonstrate the value placed on certain types of capital as well as illuminate the hierarchical nature of the academic field. Due to the hierarchical nature of the field of higher education, Berger (2000) noted that different types of postsecondary education organizations produce different retention rates, with those institutions located in the upper echelons having higher retention rates than those possessing lower spaces in the hierarchy. Berger also noted that "if we are to fully understand undergraduate persistence from a social reproduction perspective, then we must account for what is happening at both individual and organizational levels in the persistence process (p. 97). Berger recognized that organizations as well as students have certain characteristics that shape their habitus: The more congruent a student's habitus and expectations in terms of entitlements are with the way in which an organization manifests its habitus through these subsystems, the more likely that student is to persist (2000, p. 112).

There has been difficulty in operationalizing this concept in past research due to the complex nature of the theory (Bourdieu, 1973, 1984, 1986; Melguizo, 2011). Although difficult due to the complexity of the theory, it is worth developing a framework to understand degree attainment and student departure because the issue is complex and cannot be solved by looking at one initiative or intervention alone; rather, the interaction between capital, habitus, and field illuminates the social inequities that exist within educational systems. If affirmative, then it would suggest that the entire system of interventions and reforms institutions employ have not changed the pattern of degree attainment, capital gained, and in turn advancement within society as a whole. If affirmative, it would also suggest, as Bourdieu (Bourdieu, 1993; Bourdieu & Passeron, 1990; Swartz, 1997) would argue, that the role of the institution in reproducing the existing social order will not change until and unless it is confronted in the context of the larger sociopolitical system.

The data analyzed in this study were obtained from the Beginning Postsecondary Longitudinal Study (BPS) and the Integrated Postsecondary Education Data System (IPEDS). The first step in the data analyses was to explore the data using descriptive statistics. This was followed by a one-way ANOVA test to answer the first research question followed by a series of multilevel logistic regression equations to answer research questions two through four.

To explore the relationship between degree attainment and Bourdieu's constructs of capital, habitus, and field, four research questions guided the study:

1. Is there a significant difference between the bachelor's degree completion rate of transfer and native students from public 4-year institutions?

It was hypothesized that students who begin their education at a public 4-year institution, and do not transfer, have higher rates of degree attainment than students who started at a public 2-year institution, and subsequently transferred to a public 4-year institution. A one-way ANOVA verified that there is a statistically significant difference in degree attainment rates for students who start at a public 2-year versus a public 4-year institution. Descriptive statistics show that 81.4% of students who started at a public 2year institution expected to earn a bachelor's degree or higher, but 6 years after starting their postsecondary education, only 11.6% of them had actually attained a bachelor's degree. On the other hand, 98.5% of students who started at a public 4-year institution expected to earn a bachelor's degree or higher and after 6 years, nearly 60% had achieved that goal.

2. How do chances of bachelor's degree graduation change when factoring in capital?

It was hypothesized that capital has a significant influence on graduation for students, regardless of institution(s) attended. Every predictor added to measure capital increased the odds of obtaining a bachelor's degree. Having a high school GPA of 3.0 or higher on a 4.0 scale, not having to work, not being Pell Grant eligible, and having earned AP credits while in high school were the predictors with the largest magnitude; higher than any of the control variables. Students with larger amounts of capital are often attracted to institutions with higher selectivity and are more motivated to persist (Berger, 2000). In the results of the logistic regression run with predictors of capital added to the control model, every predictor led to higher probability of degree attainment. Swartz (1997) argued that the embodied state of capital begins in early childhood, sensitizing individuals to cultural distinctions and attitudes that are passed on intergenerationally. A high GPA earned in high school and earning AP credits prior to high school graduation values encompass the embodied state of cultural capital. Having a GPA of 3.0 or higher raised the likelihood of graduating with a bachelor's degree with an odds ratio of 2.773. Likewise, earning AP credits also increased the likelihood of graduating with a

bachelor's degree with an odds ratio of 1.655. Additionally, economic capital can be viewed in part by socioeconomic status as well as parent's level of education (Paulsen & St. John, 2002). In this model, students whose parents earned a degree did not have to work as much while in college, and those who were not Pell Grant eligible had higher odds of degree attainment than students who were first-generation, Pell Grant eligible, and worked while in school.

3. Does the likelihood of graduating with a bachelor's degree change when adding the effect of habitus?

It was hypothesized that habitus would be a significant contributor to degree attainment. Habitus is shaped by experiences and location in the field of power. The choices we choose to make are dependent upon what choices are visible to us and that we do not see as possible based on current contexts and past understanding (Grenfell, 2010). The results of the model confirmed that a student's academic aspirations contributed significantly to whether or not they would graduate with a bachelor's degree. Individuals internalize and develop parameters of what is possible, which creates expectations (Swartz, 1997). Therefore, it is not surprising to find that students who had aspirations of bachelor's degree attainment were more nearly seven times as likely to attain a degree, and also had corresponding high levels of capital.

4. To what extent does the field in conjunction with capital and habitus change the likelihood of graduation?

For the fourth and final research question, it was hypothesized that both student-level and institutional-level factors would contribute to degree attainment when adding in sector. Students who started at a 4-year public institution would be more likely to graduate with

a bachelor's degree or higher than students who start at a 2-year institution and subsequently transfer. Students who started at a public 4-year as opposed to a public 2year were 7.779 times more likely to complete a bachelor's degree. The next largest predictor was habitus in the form of academic aspirations. Habitus and field lessened the magnitude of all of the other predictors in the model except for age. For each unit increase in age, the likelihood of graduating with a bachelor's degree lessens, but the drop is slighter for students who started at a public 4-year institution.

This study adds to the existing conversation by shifting the conversation regarding student attrition from student-level indicators to showing how the interaction between institutional choice and social reproduction influences a student's decision to persist to bachelor's degree attainment far more than student-level indicators alone. The interrelated nature of agents, capital, and expectations within specific contexts determine specific outcomes, as in this case with degree attainment.

Conclusions, Implications, and Future Research

The aim of this study was to contribute to the retention literature by examining degree attainment for students utilizing Bourdieu's constructs of capital, habitus, and field (Bourdieu, 1973, 1977; Bourdieu & Passeron, 1990; Grenfell, 2010; Swartz, 1997). Although the determinants of persistence vary by institutional type, much of the literature examines persistence decisions for a relatively homogenous body of colleges and universities (Cohen & Brawer, 2008; Kuh et al., 2010, 1997; Pascarella & Terenzini, 2005; Snyder & Dillow, 2010). Much less attention has been given to scrutinizing persistence decisions related to institutional type for 2-year and 4-year public institutions. Public 2-year institutions are distinctive in terms of students admitted, institutional

mission, and scope, but will continue to play a key role in educating students who plan to transfer to a public 4-year institution to obtain a higher level degree.

The initial research question sought to answer whether or not bachelor's degree completion rates for students who started at a public 2-year school and subsequently transferred were different than for students who started at a 4-year school and never transferred. There was a statistically significant difference between groups as determined by one-way ANOVA (F(1, 7442)=4227.97, p<.001) indicating that there is a difference between students in the two groups. This finding substantiated previous research in that there is a statistically significant difference in bachelor's degree attainment for students based on the type of institution initially attended (Cohen & Brawer, 2008; Kuh et al., 2008; Pascarella & Terenzini, 2005; Snyder & Dillow, 2010)

The research questions were answered using a series of hierarchical logistic regressions. Beginning with the control variables and extending to the other three models, age, race, and gender are all significant predictors of degree attainment. In the control model, for every unit increase in age, the likelihood of earning a degree drops approximately 14.9%. The likelihood of degree attainment changed only slightly with the full model (but still statistically significant) at approximately 18.6% decrease in the likelihood of attaining a degree. The likelihood of bachelor's degree attainment was decreased when factoring in other indicators for capital, habitus, and field. This suggests that as the model grows more complex, age remains a significant predictor of the probability of degree attainment, and the odds of attaining a degree decrease with age when factoring in the variables of capital, habitus, and field.

For gender, 61% of all community college students are women and 57% of

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students at 4-year institutions are women (National Center for Education Statistics, 2012). For the study at hand, with respect to gender, male was the reference group and was shown to drop the likelihood of earning a degree by 19.9% over female counterparts in the full model. As Aud et al. (2012) noted, females tend to earn the majority of bachelor's degrees as well as associate degrees. For race, the reference category was White, which led to students being 1.5 times more likely to earn a degree over non-White students in the complete model. These findings were consistent with previous research (Greene et al., 2008). Students of color are also underrepresented in postsecondary institutions across sectors (Snyder & Dillow, 2010) with lower academic outcomes compared to their White counterparts (Greene et al., 2008). When controlling for institutional characteristics and precollege preparation, students get closer to parity in persistence regardless of race/ethnicity (Small & Winship, 2007), but those are important contributing factors for degree attainment. The capital that students carry along with the experiences and perspectives they bring to higher education significantly contributes to degree attainment. Since we cannot remove capital and habitus from the equation, the only piece of the calculation that can be changed is how the field of education *interacts* with capital and habitus.

The variables used to measure economic capital included Pell Grant recipient, unemployed, high school preparation, and academic integration. Students who did not receive a Pell Grant were 1.4 times more likely to complete a degree, and students who had at least one parent who earned a bachelor degree or higher were 1.5 times more likely to earn a degree, which supports the research indicating that first-generation students are at higher risk of stopping out (Chen, 2005; Lohfink & Paulsen, 2005; Nunez & CuccaroAlamin, 1998). Students who did not work while attending school were 1.6 times more likely to earn a degree. The magnitude of the odds ratio for high school preparation was considerably larger than the other variables in the model. Students who earned a high school GPA of a 3.0 or higher were 2.3 times more likely to complete a degree and students who earned AP credits while in high school were 1.5 times more likely to complete a degree.

Social capital was measured using the academic index. The academic index measured the overall level of academic integration the respondent experienced at the most recent institution attended. It was derived from the average of the responses indicating how often he or she did the following: had social contact with faculty, talked with faculty about academic matters outside of class, met with an academic advisor, or participated in study groups. Although statistically significant, the odds ratio was nearly one, which indicates that students with higher levels of academic integration experienced only a slightly higher likelihood of earning a degree. Prior research in this area differs from the findings in this study. A substantial body of research supports the notion that academic engagement and integration leads to higher levels of persistence and retention (Astin, 1993, 1999; Braxton et al., 1997; Cohen & Brawer, 2008; Pascarella, 1999; Pascarella & Terenzini, 2005; Tinto, 1975, 1993). Across all models, academic integration was found to be a significant factor, but represented a very small increase in the odds of attaining a bachelor's degree or higher. Further research on this particular finding needs to explore what kinds of interactions, if any, produce greater odds of bachelor's degree attainment.

Habitus was measured by the degree expectations of students. Students who

expected to earn a bachelor's degree or higher were 5.1 times more likely to attain a bachelor's degree than students who did not. Of the students surveyed in the data set, 81.4% who started their postsecondary education at a 2-year school expected to earn a bachelor's degree or higher and 98.5% of students who started at a public 4-year institution expected to attain a bachelor's degree or higher. The largest single predictor of bachelor's degree attainment was whether the student started at a public 2-year or public 4-year institution. Students who started their education at a public 4-year school were nearly eight times more likely to complete a bachelor's degree than students who started college at a public 2-year school when factoring in other variables related to capital and habitus.

Social reproduction theory asserts that there is a direct relationship between culture, social structure, and perceivable opportunities and is primarily concerned with the link between original class membership and ultimate class membership, and how this link is mediated by the educational system (Bourdieu & Passeron, 1990; Swartz, 1997). The possession of capital varies with class, which makes individuals who do not resemble the dominant group less likely to success in the education system.

By doing away with giving explicitly to everyone what it implicitly demands of everyone, the education system demands of everyone alike that they have what it does not give. This consists mainly of linguistic and cultural competence and that relationship of familiarity with culture, which can only be produced by family upbringing when it transmits the dominant culture. (Bourdieu, 1977, p. 494)

Short of a complete overhaul of the educational system to change the capital valued within higher education, there are changes that can be made to positively influence degree attainment in the areas of policy, practice, and future research.

Recommendations for Policy and Practice

If the nation is to meet the completion goal, the need to rely on community colleges to educate students who plan to transfer and attain a bachelor's degree is undeniable. Affordability, convenience, and federal decree will see many more students looking to community colleges as that entry point. There is an institutional-level deficit that needs to be addressed to ensure that students who start at a public 2-year institution and hope to attain a bachelor's degree gain the appropriate capital to be successful after transfer. This also means that steps need to be taken at an institutional level to provide opportunities to amend existing and create opportunities for capital gain. The results also affirm that institutions of higher education reproduce the existing social order and that changes need to occur at a systemic level to create changes in degree attainment.

According to Bourdieu (1973), the dominant group is the group that holds the most capital in terms of economic, social, and cultural resources. In the arena of higher education, public 4-year institutions hold more capital than do public 2-year schools based on the results of the final model. As the dominant player in the field, these institutions shape the values, ways of thinking, and practices of the social world of academia. They define and control the official histories that support the dominant practices that in turn are circulated and repeated with authority and are practiced and embodied in the social consciousness of all.

Two-year institutions need to work closer with their 4-year counterparts to create more transparent, seamless transfer policies. Additionally, transfer credit information needs to be easily accessible for students at the 2-year institutions and the need to familiarize students with transfer policies is paramount. Credits need not only to transfer, but they need to articulate to degree requirements. As Cutright (2011) noted, transfer policies and articulation agreements are issues that students are not accustomed to and the taking of "unnecessary" credits may keep transfer students from achieving their goals in a timely and efficient manner. Students unfamiliar with the higher education system need more opportunities to gain capital needed to successfully transfer while at the 2-year school and transition to a 4-year institution after transfer.

Students seeking to complete a bachelor's degree and who choose to start at a public 2-year institution should have access to transfer credit policies to ensure that the credits taken will count towards the receiving institution. This study's results show that the likelihood of degree attainment drops for every unit of age increase; therefore, policies directed at making the transfer process easier to understand and more transparent for students will aid not only in understanding how credits may or may not count towards a degree at the receiving institution, but also in an understanding of the transfer process as a whole in the most efficient manner possible to decrease unnecessary credits and time prior to transfer.

Educational capital was a significant predictor of degree attainment. Of all the predictors associated with economic capital, whether or not a student was working while in school was the predictor with the largest magnitude with an odds ratio of 1.565 in the final model. Students cannot change their parents' income level or whether or not either parent received a degree, but institutions can do more to provide resources needed to prevent students from working. Increasing the availability of need-based aid that covers the costs of attending an institution would increase students' odds of completing a degree. For students who need to work while in college, on-campus employment opportunities

can have a substantial positive effect on leadership development, peer interaction, and overall engagement (Salisbury, Pascarella, Padgett, & Blaich, 2012).

According to this study, aside from where a student enters postsecondary education and their academic aspirations, the factor with the next highest magnitude dealt with high school preparation. Having a higher high school GPA and earning AP credits while in high school led to a higher likelihood of completing a degree. Without making changes at all levels of compulsory education, 2-year institutions are tasked with serving students who may not have completed high school with a high GPA nor took AP credits, but who still hope to earn a college degree. Students, who may not be as prepared through these preparation markers, may be at higher risk of stopping out (Choy, 2002; Pascarella & Terenzini, 2005; Seidman, 2012). Programming centered on students who are underprepared to get them through remediation at a pace on par with better prepared students may assist them through associate's degree attainment.

Clear pathways for students to move through remediation and to college-level classes in the shortest possible timeframe are needed. The effects of remedial coursework are mixed with some studies finding that remedial coursework helps prepare students for college work and others arguing that it is diversionary and prevents students from taking college-level classes (Martorell & McFarlin, 2010; Scott-Clayton & Rodriguez, 2014). If institutions retain remediation through classes, intensive, shorterterm remediation that quickly moves students to classes that apply to degree programs should be the goal.

Future Research

Of the 81.4% of students who desired to attain a bachelor's degree or higher and started at a public 2-year institution, only 14.4% attained an associate's degree and 11.6% attained a bachelor's degree. A next step for future research would be a qualitative study analyzing why many students do not attain their desired degree. Understanding whether students' degree goals changed or life circumstances changed and prevented them from reaching their ultimate academic goal, or whether the institutional policies and practices hindered degree attainment would lend a much needed perspective to the current analysis.

This study looked at students who had either never transferred or transferred a maximum of one time with upward transition (2-year to 4-year). It would be interesting to examine all of the variations of student transfer (upward, downward, and lateral) and include multiple transfer attempts to see how the number and type of transfers may impact student degree attainment; this would account for the growing number of degree "swirlers" and reverse transfer students.

In addition, the findings of the current study align with findings from previous research, but the impact that academic integration index had on degree attainment was smaller than expected. Based on research on student engagement and integration (Berger & Braxton, 1998; Braxton, 2000; Pascarella & Terenzini, 2005; Tinto, 1975, 1993), the expected magnitude of the odds ratio for academic integration was much higher. Additional studies focusing on the interaction effect of the academic integration index on the control variables may yield different results.

One of the limitations of the current study is that the BPS 04/09 data set includes one group of postsecondary students. The landscape of higher education has changed since the great recession and the student profiles have also changed. It would yield interesting results to see if the same outcomes are found when the new BPS data become available after 2017 for the BPS 12/17 cohort group.

If states are to meet the 2020 completion goal, 2-year institutions will need to confer an additional 5 million degrees. In order to achieve the goal, adequate funding at the state and federal level will need to be investigated to ensure the infrastructure will support this growth. Additional research on the graduation rates of residential versus nonresidential 2-year institutions may also show differential degree attainment rates for students. Furthermore, investigating the current funding structures at the state and federal level may produce recommendations policy-makers can use to change the structures in place that discourage institutions from placing importance on the success of transfer students.

Summary

Educational attainment is an issue of interest at the student- and institutionallevel. Opportunities for gainful employment often require at least an associate's degree or higher and institutions are pressed to increase enrollment as well as graduation rates to maintain current funding levels. The majority of students who enter postsecondary education in the public sector hope to earn a bachelor's degree or higher, but students who begin at a public 2-year institution do not attain degrees at the same levels as students who begin their education at public four-year institutions.

The 2-year college sector is tasked with the insurmountable expectation of training and educating students with a variety of missions and goals. It is beneficial to understand the goals and expectations of incoming students and group students who

intend to attain a bachelor's degree or higher to introduce them to pertinent information on degree programs, transfer process and policies, and resources and information aimed at smoothing the transition process when they are ready to transfer. Students who are attempting to transfer from the 2-year field to the 4-year field experience a shift in environment that impacts the habitus and capital in the subsequent field. Possessing a lower position on the hierarchy, students from these institutions may not feel compatible in the new environment, leading to higher rates of attrition. The institutional habitus needs to be considered for students making the transition from one field to another to ensure that students who aspire to bachelor's degree attainment and embody attitudes, beliefs, and characteristics that differ from the hegemonic population are not marginalized.

The four-year sector would benefit from creating programs aimed at easing the transition for students transferring. Programs that address the diversity of the transfer population will also help students feel a sense of belonging to an institution that may feel foreign. Programs for nontraditional students and other underrepresented groups may create an atmosphere that feels smaller and more familiar to students transitioning from a smaller community-oriented institution to an often larger, public 4-year institution.

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