

INSTITUTIONAL INFLUENCES AFFECTING THE COLLEGE-GOING DECISIONS
OF LOW-INCOME MOTHERS ATTENDING A RURAL MIDWESTERN
COMMUNITY COLLEGE

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Kristin B. Wilson

Dr. Barbara Townsend, Dissertation Supervisor

ABSTRACT

Education has proven one path out of poverty for low-income single mothers, yet many are not completing and transferring at high rates. Using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances. This was a qualitative study using a multiple-case study approach. Each participant was an individual case, and there were ten cases studied. For the participants in the study, the Pell Grant was an important avenue of access to the community college; however, it was not sufficient to serve as an avenue of access to the baccalaureate. As well, the lack of access to health coverage, child custody agreements, and an unwillingness to relocate proved to be important barriers to degree completion. Policy and practitioner implications include providing advising at the college

about the intersections between higher education programs and welfare programs, developing learning communities for single mothers enrolled in higher education, and developing programs that bring a baccalaureate degree to rural areas.

Implications for research include using conceptual frameworks that captures the whole life experiences of disadvantaged groups, disaggregating migration research to consider community college students separately, and studying how Work-Study funds are used by institutional context.

Chapter 1

OVERVIEW

Introduction

The much touted and debated Spellings Commission report, *A Test of Leadership: Charting the Future of U.S. Higher Education*, has focused attention on the relationship between higher education and economic development in the United States (U.S. Department of Education, 2006). The report claimed:

In tomorrow's world a nation's wealth will derive from its capacity to educate, attract, and retain citizens who are able to work smarter and learn faster – making educational achievement ever more important both for individuals and for society writ large. (p. ix).

The report asserted higher education's status quo will not be sufficient to generate increases in human capital necessary for self-sustaining economic development. Therefore, higher education must change to meet the demands of a growing knowledge economy. One of the five goals for higher education listed in the Spellings Commission report is "we want a world-class higher-education system...that contributes to economic prosperity..., and empowers citizens" (p. viii). Higher education is to contribute to the economic growth of the nation by empowering citizens to act in society.

Accomplishing the goal of self-sustaining economic growth means considering the ways institutions, like higher education, create market inefficiencies through their rules and norms (North, 1990). For example, the low rate of transfer from community colleges to the baccalaureate sector (e.g., Dougherty & Kienzl, 2006) is an institutional inefficiency. To explain institutional inefficiencies, institutional economists employ theories of economic behaviorism to argue that individuals make decisions based on their institutional context rather than their utility (Campbell, 2004). Institutional economists

assert that choice is not only bounded by the ability of humans to understand, which is the basic idea behind bounded rationality, it is constrained by institutional norms (North, 1990). Human choice is more like a multiple-choice question where the questions and options are provided by the institution than it is like an open-ended question. Nobel Prize winning economist Douglas North (1990) argued that institutional norms can work against each other, thus inhibiting economic development by constraining human choice. According to North, institutions need to be studied in interaction with other institutions to understand how conflicting institutional norms may be prohibiting economic growth.

Economic literature contributes a great deal to understanding economic growth. Pointing to the importance of widely-shared economic growth, economic theorists have concluded that in countries where income is more equally distributed economic growth is greater (Galor & Zeira, 1993; Voitchovsky, 2005). However, this general effect hides complexities that are important for higher education (Voitchovsky, 2005). For example, using US county data, Fallah and Partridge (2007) found that the link between income inequality and economic growth is *positive* in metro areas and *negative* in rural areas. In other words, greater income inequality in metro areas equated to greater economic growth, while greater income inequality in rural areas equated to less economic growth. Fallah and Partridge conclude that policies encouraging growth in human capital (e.g., increased access to higher education) in rural areas will likely have a positive impact on economic growth. In a study using county-level data, Goetz and Rupasingha (2003) calculated the income return on education across states and across metro and non-metro areas. They found that increases in education results in increased income in general, but there are important contextual variations. Dividing the states into the four

census regions and considering metro and nonmetro differences, they found that in three regions, northeast, northcentral, and southern regions, the returns on higher education are twice as large in metro areas as in nonmetro areas. As well, Aghion, Coustan, Hoxby, and Vandebussche (2006) studied the impact of states' investment in community colleges versus states' investment in baccalaureate institutions and found that investments in community college education resulted in economic growth in rural areas. Research on economic development demonstrates that the relationship between human capital and economic growth is contextual (e.g., Aghion, Coustan, Hoxby, & Vandebussche, 2006; Keller, 2006; Mamuneas, Savvides, & Stengos, 2006).

The contextual nature of economic development means that effective change in higher education will be contextual in nature as well. A broad-sweep approach to change will not ensure self-sustaining growth (Evans, 2004; North, 1990). Specifically, policies that positively affect economic development will target groups of individuals in the greatest need of economic stability (Sen, 1999).

In the United States, one such group is low-income mothers. In 2006, 36.5% of single mothers lived at or under the U.S. Census Bureau poverty threshold (CPS, 2007). For a woman with two children and no husband, that threshold was \$16,242 of income in 2006 (U.S. Census Bureau, 2007). As well, 53% of single mothers lived at or under 150% of the poverty threshold (CPS, 2007) which was \$24,363 of income (U. S. Census Bureau, 2007).

The Spellings Commission addressed single mothers generically through another of the named goals: "we want a system that is accessible to all Americans, throughout their lives" (U.S. Department of Education, 2006, p. viii). For low-income mothers,

having access to higher education can mean economic stability (Pandey, Zhan, Youngmi, 2006).

Adult women are most likely to access higher education through community colleges. Goan and Cunningham (2007) found that at medium-sized community colleges, 79% of the students are over 20 years of age, and 62% of the students are women. In addition, 38% of community college students at medium-sized colleges are independents with dependents (Goan & Cunningham, 2007). However, researchers have demonstrated that adult women who begin at community colleges often fail to persist in college, fail to transfer, and fail to complete a degree (e.g., Dougherty & Kienzl, 2006; Dowd & Coury, 2006; Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006).

Specifically, Berkner, He, Mason, and Wheelless (2007) considered degree attainment and persistence through 2006 using 2003-2004 BPS data. Sixty percent of the single parents who enrolled in a 2-year institution in 2003 did not have a degree and were not enrolled in college in 2006. As well, 55% of the married parents who enrolled in a 2-year institution in 2003 did not have a degree and were not enrolled in college in 2006 (Berkner, He, Mason, & Wheelless, 2007). Using IPEDS (Integrated Postsecondary Education Data System) data, Bailey, Calcagno, Jenkins, Leinbach, & Kienzl (2006) found that, in the community college sector, institutions with higher proportions of women have lower graduation rates than do institutions with higher proportions of men. Using data from the 1989-1990 NCES and the Beginning Postsecondary Students, Second Follow-up (BPS 90/94), Dowd and Coury (2006) tested the effect of indebtedness on persistence at community colleges. They found that older students who are classified independent are less likely to persist than dependent students. Relative to earning a

baccalaureate degree, Dougherty and Kienzl (2006) found that older students, especially those with children, are less likely to transfer from the community college to the baccalaureate sector.

Although single mothers represent a sizable portion of community college students, they are not completing and transferring at high rates (e.g., Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). Yet research indicates that higher education can positively affect economic development through educational access for low-income mothers (Pandey, Zhan, Youngmi, 2006). To accomplish the Spellings Commission goal of accessible higher education and economic opportunity through education, more research is needed that considers the contextual variations in the income/growth relationship and the education/income relationship, as well as the impact of these contexts on individual decision-making about college attendance for at-risk groups, such as low-income mothers.

Conceptual Framework

Implicit in the two Spellings Commission goals of lifelong learning and economic opportunity is the notion of *economic development* through education. Economic development can be distinguished from economic growth in that growth is confined to increases in gross domestic product (GDP), while development encompasses increases in GDP that are widely-shared and self-sustaining. One conceptual framework geared at achieving economic development is described by Amartya Sen (1999) in *Development as Freedom*. Sen defines economic development using the term *substantive freedoms*. Sen wrote, "[T]he usefulness of wealth lies in the things that it allows us to do – the substantive freedoms it helps us achieve" (p. 14). Sen argued that society's institutions

can be judged by considering the "functionings and capabilities of its weakest members" (p. 132). The distinction between functionings and capabilities is that functionings capture the ways people act in societies and capabilities are the ways people could act. If a country is experiencing increases in GNP, but its poorest members do not have the capacity to get healthcare when it is needed, then the country is not experiencing economic development. Sen used access to education and healthcare extensively as examples of substantive freedoms or capabilities and functionings, as well as access to the credit market (e.g., student loans) and access to employment that raises one above poverty status. However, Sen has been criticized for underspecifying the capabilities and functionings he sees as critical to society.

Several economists have worked to specify Sen's capabilities and functionings (Robeyns, 2003). One such specification was developed by Ingrid Robeyns, a feminist economist. She delineated fourteen capabilities or functionings and classified the fourteen into three types. While all fourteen will be named and described in Chapter 2, three will be briefly described here. Type I capabilities and functionings are those intrinsically desirable to all humans, such as shelter and health. Type II capabilities and functionings are those people choose to achieve, such as education and leisure. Type III capabilities are those that are most likely to be unequally distributed based on class, gender, and race, such as political empowerment and domestic work. Robeyns is most concerned with gender inequalities, but my study confounds gender and class in that all the participants are financially-strained women.

Sen (1999) also contended that social policy can enact freedoms or opportunities. He wrote, "[P]ublic policy...is the art of the possible" (p. 132). Sen's framework is not

specific enough to capture the relationship between the policy and individual decision-making. However, another institutional economist, David Dequech (2006), has described three influences institutions have on individuals: restrictive, cognitive, and motivational.

The *restrictive function* of institutions is their role in constraining economic behaviors (Dequech, 2006). For instance in welfare reform, when the Personal Responsibility and Workforce Opportunity Act passed in 1996, it was premised on a "work-first" philosophy which necessarily discouraged or constrained the choice of education (e.g., Shaw, 2004). *Norms* are a group's rules of behavior that derive from values (Henslin, 2006). In the case of welfare reform, the norm was work. Education, by contrast, is considered counter to this norm and discouraged.

The *cognitive function* of institutions refers to their influence on individual thinking (Dequech, 2006). There are two aspects of this function. One is the information provided through institutional policies and rules that guide individual thinking about the behavior of others. For example, articulation agreements encourage students to make particular curricular choices with the expectation that the chosen courses will transfer as indicated by the policies. The second aspect of the *cognitive function* is the influence that institutions have over an individual's perception of reality. For example, community college transfer students sometimes indicate that it is difficult to make friends at the receiving institution because of its large classes (Townsend & Wilson, 2006). Transfer students say that at their community college they form friendships through coursework, while at the baccalaureate institution friendships form through extracurricular activities. These contrasting institutional norms influence the transfer students' understanding of reality at the baccalaureate institution (Townsend & Wilson, 2006).

Finally, the *motivational function* of institutions refers to their influence on an individual's goals or "the ends that people pursue" (Dequech, 2006). For example, if a student has the perception that there is greater job opportunity and income potential in being a nurse rather than an emergency medical technician, the student might well choose nursing as a major. Although Dequech's (2006) institutional influences overlap with one another, they are useful for thinking about the ways institutions influence individuals and individual decision-making relative to college attendance.

Review of Literature

Few studies consider mothers in higher education directly. More likely, this population is a subcategory within a larger study. While the literature review in Chapter 2 is a more comprehensive view of relevant literature, in this chapter the review is confined to the literature in which adult women in higher education are the target population.

Using the 2000 National Longitudinal Survey of Youth (NLSY79), Pandey, Zhan, Youngmi (2006) studied the impact of education on poverty for mothers, both single and married. The authors found that having a degree significantly reduces the likelihood of poverty for both single and married mothers. Thus they conclude that their "study shows that we can reduce poverty among women with children through a college education especially among women that are motivated to pursue their education" (p. 500). Using the 1993 Panel Study of Income Dynamics (PSID) data, Zhan and Pandey (2004) found that among single mothers having an education significantly improves economic status. London (2006) used the same database as did Pandey, Zhan, Youngmi (2006) and noted that among welfare recipients welfare recidivism is significantly reduced by a college degree. As well, Attewell and Lavin (2007) found that some applied associate's degrees,

like nursing, have a greater payoff, in terms of earnings, than do baccalaureate degrees. In addition, they found that there is some economic payoff for women who attended college, but did not complete a degree. In sum, the research indicates that having an education improves the economic circumstance for mothers.

However, women do not always perceive themselves as welcome in postsecondary institutions. In a mixed-methods study of 69 low-income women enrolled in an educational training program, Bullock and Limbert (2003) found that the women expected college to result in a middle-class status; however, they were uncertain that postsecondary education was open to them and their children. The women in this study did not see postsecondary education as accessible.

Although a number of studies indicate that degree attainment is low among adult women (e.g., Alfonso, 2006), there is some evidence that the low rates can be explained by the short time frames under study. In a longitudinal study, Attewell and Lavin (2007) used CUNY (City University of New York) and NLSY data to consider the impact of education on disadvantaged women. The CUNY data are survey responses from 2000 women who attended the college from 1970's to 2000's. Of the CUNY cohort, 71% of the women earned a degree within the thirty-year time frame of the study. Attewell and Lavin argued that this high rate of degree completion suggests that capturing a longer time frame might be important for understanding degree attainment among adults.

Although Attewell and Lavin (2007) found that degree attainment rates are higher if the time frame under study is longer, they conceded that women from the most disadvantaged families are less likely to complete a degree than their counterparts from wealthier backgrounds. This finding coincides with those of Alfonso (2006) and

Dougherty and Kienzl (2006). Taken together, the evidence shows that mothers and their children benefit from postsecondary education, but that postsecondary education is difficult to access for low-income mothers.

Mothers seem to understand the importance of postsecondary education for their children. It is often the desire to improve life for their children that encourages low-income mothers to try higher education. For example, Haleman (2004), in an ethnographic study of 10 mothers receiving public support and enrolled in higher education, found the women wanted to model educational attainment for their children. As well, Jennings (2004) conducted a qualitative study of young welfare recipients in college to determine how these women imagine themselves, especially in contrast to negative images of women in poverty. Jennings concluded that education was the path used by the women to resist negative images, and that the women were motivated by the desire to create a better life for their children. In another qualitative study, Luttrell (1997) taught a remedial education class and interviewed adult women returning to college. Many of the mothers indicated that they were returning specifically to be a good example for their kids or to demonstrate their worth as an individual to their kids or spouse. These studies indicate that mothers often are motivated to seek an education because they want to improve the lives of their children. Attewell and Lavin (2007) tested this reasoning and found that mothers pass on their educational advantage to their children through their parenting practices and through the later educational attainment by their children.

Unfortunately, low-income mothers do not always view postsecondary education as accessible despite being strongly motivated by the desire to improve their children's lives. Attewell and Lavin (2007) observed that "our statistics represent in the barest

outline the complex struggles of many individuals" (p. 7). Research that captures the complexities in more detail may be able to contribute a fuller understanding of college-going decisions amongst low-income mothers in higher education.

Purpose of Study

Using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

Research Design

This was a qualitative study using a multiple-case study approach. Case studies are bounded systems (Creswell, 2007; Stake, 2005). As such, this multiple-case study has three boundaries. First, all of the women in the study were single mothers for some portion of their community college enrollment period. Second, all of the women in the study are low-income. Third, all of the participants were enrolled or are enrolled in a rural community college. By using multiple cases, I could replicate findings across cases through literal replication and theoretical replication (Yin, 2003).

Using theory-based sampling, the population was entirely made-up of low-income mothers in higher education (Patton, 2002). Seidman's (2006) three-interview series provided the basic design for data collection.

Data analysis began with an individual-level logic model (Yin, 2003) for each case. Using Stake's (2006) worksheet approach for cross-case analysis, I performed an issue-level analysis between cases. Data were triangulated through three types of triangulation: data triangulation, investigator triangulation, and within-method triangulation.

Research Questions

Stake (1995) advised case study researchers to construct issue questions and information questions. Issue questions evolve from the literature and the researcher, but issue questions also evolve as the study proceeds. The issue questions beginning this study are:

1. What is the nature of the capabilities that low-income mothers believe they will gain or do gain by attending the community college?
2. How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education?

Information questions lead to the descriptive details necessary for analysis on issues to occur (Stake, 1995). In this study, decisions about how and when to gather responses to the information questions were informed by Seidman's (2006) three-interview sequence. The broad information questions were:

1. What was your life like before attending college?
2. How did you come to attend the community college?
3. What policies have helped or hindered you attend college?
4. What does college attendance mean to you?

5. How do you expect life to be different after college attendance?

Definitions

The following definitions were used in the study.

Demand sensitivities: The personal preferences that impact the demand for a good (Gottheil, 2002).

Capabilities: What people are able to do in society or to be in society (Nussbaum, 2003; Robeyns, 2003; Sen, 1999).

Economic development: A sustainable increase in the standard-of-living across a nation's population, often measured by employment, income, healthcare, and education (Adelman, 2000).

Economic growth: An increase in gross domestic product (GDP), or an increase in the value of goods and services produced by an economy (Gottheil, 2002).

Functionings: What people actually do or become in a society (Robeyns, 2003).

Institution: "[H]umanly devised constraints that structure political, economic and social interaction" (North, 1991, p. 97).

Substantive freedoms: Freedoms that enhance the quality of life, specifically access to education, healthcare, employment, and the credit market (Sen, 1999). The sum of all human capabilities constitutes the substantive freedom to live a life that an individual has reason to value (Nussbaum, 2003; Robeyns, 2003; Sen, 1999). For Sen (1999), substantive freedoms are socially just, or unconstrained by race, gender, or class.

Limitations

The findings of this study have limited transferability. The participants were drawn from a rural Midwestern region, and all of the participants have attended or are

attending the same community college. As a result, state policies, institutional policies, and state and institutional interpretations of federal policies impacted the functionings of the women who participated in the study; however, the same study in another state might result in different functionings. Given the nature of the study, broad generalizations across the population of low-income mothers could not arise from this study; rather, generalizations involved policy analysis and theoretical notions (Stake, 1995).

Another limitation involves Type III functionings which are those that are likely to be unequally distributed according to race, class, and gender (Robeyns, 2003). All the participants in this study were both female and low-income. As a result, gender and class are conflated in the study. It is impossible to tell which functionings are limited because of gender and which functionings are limited because of class.

Finally, the study was based on economic literature that presumes a causal relationship between increases in human capital and economic growth (e.g., GAO, 2007). Although much research has demonstrated that this relationship exists, focusing on these two variables may hide other complexities (Voitchovsky, 2005). For instance, job creation strategies must be aligned with educational strategies to create the right economic mix so that economic growth will occur.

Significance of the Study

The findings of this study have implications for researchers and policy-makers. Economic development through education has the greatest potential when targeting those groups in the most need. Rural poverty is high and negatively associated with economic growth (Fallah & Partridge, 2007; Fisher, 2007); however, postsecondary education can promote economic growth (e.g., Voitchovsky, 2005). Single mothers experience high

rates of poverty (CPS, 2007). Unfortunately, degree attainment rates are low among single mothers (e.g., Attewell & Lavin, 2007; Alfonso, 2006). Past research has indicated that when mothers do complete a degree, their economic circumstances improve (e.g., Pandey, Zhan, Youngmi, 2006). Understanding the relationship between the college-going decisions made by low-income single mothers and the federal, state, and local policies they use to manage their economic circumstances pointed to policy interventions or policy changes that may promote college degree attainment among single mothers. In addition, the findings pointed to important avenues for future research concerning disadvantaged populations, including single mothers.

Summary

One clear message from the Spellings Commission report is that the economic stability of the United States depends upon increasing college enrollment and graduation (U.S. Department of Education, 2006). The Spellings Commission's goals of lifelong learning and economic stability work in tandem. The report focuses on what institutions must do in terms of goals, but ignores various government policies affecting low-income adult students' decisions to attend college or maintain enrollment. Poverty among single mothers is high, but research has demonstrated that it can be alleviated by college degree attainment (e.g., Pandey, Zhan, Youngmi, 2006). This study illustrates how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance.

Chapter Two

LITERATURE REVIEW

Introduction

Linking economic growth to broader access to higher education was a central theme in the U.S. Department of Education's (2006) *A Test of Leadership*. The Spellings Commission claimed that:

America's national capacity for excellence, innovation and leadership in higher education will be central to our ability to sustain economic growth and social cohesiveness. Our colleges and universities will be a key source of the human and intellectual capital needed to increase workforce productivity and growth (p. 6).

Policy analysts generally believe that opportunity through higher education that results in increased human capital will result in economic growth (Kirsch, Braum, & Yamamoto, 2007; Reindl, 2007; U.S. Department of Education, 2006). However, economic literature suggests that the relationship among education, income, and economic growth is highly contextual. Institutional economists generally believe these varying contextual relationships can be explained by understanding institutional influences on individual decision-making, particularly economic decision-making. Using an economic development lens, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

This literature review is divided into five sections: (1) conceptual framework; (2) human capital and economic growth; (3) education borrowing and the credit market; (4) college factors; and (5) education and low-income mothers. The first section is a description of the conceptual framework used for this study. The second section reviews the literature that connects income to economic growth, as well as education to economic growth. The third section reviews literature related to the student borrowing segment of the credit market. The fourth section reviews the factors related to college attendance that predict such variables as delaying enrollment, not persisting, not transferring, or not graduating. The focus is on the literature that captures the population under study. Finally, the fifth section reviews literature about the impact of education on low-income mothers.

Conceptual Framework

Economic growth can be distinguished from economic development in that growth is concerned with GDP (gross domestic product) and individual earnings or income, whereas economic development is a far broader concept (Adelman, 2000). Economic development combines self-sustaining growth, changes in production patterns, technological upgrading, institutional change, and widespread improvement in the human condition (Adelman, 2000). All of the literature reviewed in the human capital and economic growth section is concerned with economic growth often measured by aggregate income; however, the conceptual framework for this study is economic development because economic development is an ideal lens for understanding the impact of a lack of income on human functionings or the things humans are able to do or become in society. This is particularly appropriate because I studied how single mothers

used certain government and institutional policies to facilitate their attendance at a community college.

The United States has experienced growth, as measured by GDP, over the past decade (Su, 2005), yet the economic circumstances for low-income and middle-class families have declined (Weller, 2006). Real earnings declined between 2000 and 2004 (Weller, 2006), and income disparity or inequality is increasing, not just in the United States, but around the world (Stewart, 2000; Weeden, Kim, Di Carlo, & Grusky, 2007; Weller, 2006). As well, increasing numbers of Americans live without basic health coverage (DeNavas-Walt, Proctor, & Smith, 2007). These conflicting measures of economic health highlight the difference between growth and development.

The distinction between economic growth and economic development is important because economic growth can occur at the top-end of the income scale only, while economic development refers to growth that is widely shared. The Spellings Commission (U.S. Department of Education, 2006) report calls for a postsecondary system that is "accessible to all Americans, throughout their lives" (p. viii) or higher education that is widely shared; therefore, changes in higher education need to be directed at economic development, not economic growth. The conceptual framework for this study is based on the work of three institutional economists: Sen (1999), North(1990) and Dequech (2006). Institutional economists study the influence of institutional arrangements on economic development.

Sen (1999) viewed economic development as a process of increasing substantive freedoms for individuals. These freedoms include education, healthcare, employment, and access to the credit market. Sen wrote, "The discipline of economics has tended to

move away from focusing on the value of freedoms to that of utilities, incomes and wealth. This narrowing of focus leads to an underappreciation of the full role of the market mechanism" (p.27). Sen argued that by focusing on freedoms, growth will result, but it will be more widely dispersed. In other words, development will result in growth, but growth will not necessarily result in development. For example, access to higher education is a substantive freedom which will result in economic development and subsequently economic growth (Sen, 1999). The benefit of providing access to education and supports for educational success for those at the low-end of the income spectrum will be shared by society as a whole (Sen, 1999).

Sen (1999) noted three important aspects of low-income. First, poverty is more closely associated with capability deprivation (e.g., not being able to access quality education) than it is with a lack of income. Second, poverty is caused by forces other than a lack of income. It is caused by not being able to access capabilities (e.g., a handicapped person being unable to access prosthesis therapy or a person for whom English is a second language being unable to access literacy training). Third, the relationship between income and capabilities is variable and based on the ideas held by those of low income (e.g., families that educate sons more than daughters).

Many scholars have criticized Sen (1999) for not specifying the capabilities and functionings that are important in society, and several scholars have attempted to specify Sen's approach. Among them is Robeyns (2003). Robeyns is most concerned with gender inequities, but her list of capabilities is equally applicable to class inequities. As well, Robeyns is concerned with using her list of capabilities in policy research, which makes her list particularly appropriate for this study. She names 14 capabilities and classifies

them into three types. The first type are those capabilities that are intrinsically desirable to all humans. They include life and physical health, mental well-being, bodily integrity and safety, shelter and environment, and respect. Life and physical health not only includes the capability to maintain ones life, but also to maintain ones health, or health care. Mental well-being includes the absence of worry or stress, as well as the absence of mental illnesses like clinical depression. Bodily integrity and safety is negatively affected when people experience violence of any sort. Shelter and environment is having a place to live, as well as having pleasant and healthy surroundings. Finally, the capability of garnering respect and being treated with dignity suggests that the contributions people make to society will be valued by others.

Type II capabilities are those that people must work to achieve (Robeyns, 2003). They are education and knowledge, religion, leisure activities, time-autonomy, and mobility. The capability to gain education and knowledge is an achieved functioning. It is particularly important to this study. Because people chose to participate in religious and leisure activities and do so at varying rates, religion is an achieved functioning. Time-autonomy refers to the capability to choose how one spends ones time. Finally, mobility is the ability to move from place-to-place.

Type III capabilities are those most likely to be unequally constrained (Robeyns, 2003). They are social relations, political empowerment, domestic work, and paid work. The capability to form positive relationships with others is the capability of social relations. When one is able to act in society based on political motivations, one has the capability of political empowerment. Domestic work is the capability to care for others without pay. Finally, paid work is the capability to gain paid employment in society.

Although Sen (1999) acknowledges the importance of institutions, his work is centered on the individual. By contrast, North's (1990) work is centered on the institution. North (1990) defined institutions as "humanly devised constraints that structure political, economic and social interaction" (North, 1991, p. 97). North (1990) viewed institutional arrangements as critical to economic development. He considered informal and formal constraints as both aiding to institutional efficiency and as creating institutional inefficiency. North believed economists "need to know more about culturally derived norms of behavior and how they interact with formal rules" (p. 140) to understand institutional change that creates productive market mechanisms or mechanisms which cause economic development.

North's general ideas are specified by Dequech (2006) who named three influences institutions have on individual thinking. The first is the *restrictive* function. Institutions restrict economic behavior. For instance, a student may choose major A, because the college s/he attends does not offer major J. In other words, expressed preferences may differ from real preferences because of institutional rules or norms (Immergut, 1998).

The second is the *cognitive* function which has two aspects. First, the cognitive function refers to the information institutions offer individuals, including information about the actions of others (Dequech, 2006). For example, a community college will offer students information about what courses will transfer to baccalaureate institutions. The student expects the baccalaureate institution to accept the course because of the information offered by the community college, so the student enrolls in the course. Second, the cognitive function refers to the way institutions influence an individual's

understandings of norms (Campbell, 2004; Dequech, 2006; Mantzavinos, North, Shariq, 2001). *Norms* are behaviors which reflect *values* (Henslin, 2006; Portes, 2006). An individual may hold a value, but be uncertain about what actions will achieve that value (Dequech, 2006). Institutions offer directives for individuals about appropriate values and how to express values through appropriate norms (Dequech, 2006).

The third influence Dequech (2006) called the *motivational* function meaning the influence institutions exert on individual motivations to achieve particular ends. For example, articulation agreements might motivate students to choose one major over another.

Robeyns (2003) and Dequech (2006) provided the framework for this study. The interview protocol in Appendix A ties the interview questions to the conceptual framework. Interview analysis was based on Robeyns' (2003) capabilities, as well as Dequech's (2006) three institutional influences.

Human Capital and Economic Growth

Is there reason to believe the economic health of the nation depends on changes in higher education? Economic literature does not make a clear and broad connection between college and economic growth. In fact, some research has indicated that for developed countries further investments in education will not result in economic growth (e.g., Krueger & Lindahl, 2001), so why the cries for change in American higher education? To answer this question, this section reviews literature on the relationship between education and economic development and/or economic growth.

When economists refer to economic growth, they are referring to an increase in the value of goods and services produced by an economy, an increase measured by gross

domestic product (GDP) (Gottheil, 2002). Sustained economic growth results in increases in everyone's standard-of-living or in economic development (Adelman, 2000). There are four generally accepted factors in economic growth (Gottheil, 2002): first, the size of the labor force; second, the degree of labor specialization; third, the size of capital stock; fourth, the level of technology. In examining the relationship between higher education and growth, all four factors come into play. First, the size of the labor force for any market depends on whether that labor force has the skills necessary to perform the labor. Second, specialization in the labor market is largely accomplished through education. Third, capital stock is impacted by the credit market, and student borrowing is an increasing portion of the credit market. Fourth, technological innovations are often driven by investments in research at universities.

Studies across countries can aid in understanding the relationship between education and growth in the United States; however, it is important to note from the onset that researchers question cross-country data about education and growth (Krueger & Lindahl, 2001). Specifically, Krueger and Lindahl (2001) argued that it is difficult to identify the causal effects in the education/income relationship. In fact, they contended that regional studies may offer better understandings of the contextual relationship between education and income. Throughout this section, several of the difficulties in identifying causal relationships are discussed.

Using panel-data across both developed and underdeveloped countries, Keller (2006) studied the relationship between GDP and education and found that secondary education most positively impacts GDP. As well, she concluded that in developed countries higher education expenditures unfavorably impact GDP. Keller speculated that

this may be because the dollars are spent on so few students. These are global findings across nations, but they are useful in noting how the United States compares.

Using data from 51 countries, Mamuneas, Savvides, and Stengos (2006) calculated the output elasticity of human capital. In other words, they determined the relationship between an incremental change in human capital and an incremental change in GNP. What they found is wide variability among countries. Some countries can expect sizable improvements in GNP when they invest in human capital while other countries cannot expect the same payoff. In a French study of the relationship between human capital and GNP, Monteils (2004) concluded that investments in education "*cannot* [emphasis added] be the engine for ... economic growth" (p. 103). She contended that for France, "causality links between education and growth...are not verified" (p. 113), and that the law of diminishing returns applies to education. However, Mamuneas, Savvides, and Stengos (2006) found that the United States has the largest average elasticity of the high-income economies in their study. France, by comparison, has a significantly lower output elasticity. The authors reasoned that in countries where elasticity is low, education is directed at unproductive activities; whereas, in countries with high levels of technology and international trade, education is directed toward more productive activities.

A similar explanation may be that the United States is the largest producer of research university knowledge in the world (Marginson, 2006). As such, funding from around the globe is directed at American research universities efforts. Marginson (2006) noticed that American advantage in the market has been insulated from global competition by various policies including subsidized graduate education which attracts many foreign students. Marginson concluded by noting that "a more balanced global

distribution of capacity" (p. 1) is possible through "policy action ...coordinated across borders" (p. 36).

The research university explanation for the strong output elasticity in the United States is further supported by research on the regional impact of research universities in this country. Considering the metropolitan level impact of four-year colleges, Goldstein and Drucker (2006) use a dependent variable of the average annual earnings per non-farm worker and independent variables of research expenditures, degrees, and patents to estimate the economic impact of research universities on regional agglomeration economies or clusters of economic activity external to the university. They found that "teaching and basic research ... have a substantial positive effects on regional earnings gains" (p. 36). This finding is particularly pronounced in small- and medium-sized markets. In a subsequent literature review, Drucker and Goldstein (2007) considered research from single-university studies, surveys, knowledge production function, and cross-sectional and quasi-experimental designs concluding that in totality university activities positively impact regional economic development. They advise that state and local policies which develop university functions in the name of economic development are well supported by the research.

However, neither their original research (Goldstein & Drucker, 2006) nor their literature review (Drucker & Goldstein, 2007) considers the possible impact of area community colleges on the economic activity in the region. In other words, the economic impact of community colleges in these regional areas is hidden within independent variables like the number of bachelor's degrees, or in unexplained variance. Further, the United States has the most developed community college system in the world (Raby &

Thomas, 2006). Remembering Mamuneas', Savvides', and Stengos' (2006) speculation that countries with high output elasticity are using educational funding in productive areas, it may be that community colleges in the United States are contributing more to the output elasticity in the American system than is clear in the current research.

In sum, much of the elasticity in GDP through human capital may be attributable to the strong research university environment in the United States. Relative to this study, the relationship between community college education and economic growth appears to be hidden within impact studies about the research university.

Very little scholarly research has been done on the economic impact of the community college; however, Aghion, Coustan, Hoxby, and Vandebussche (2006) sought to separate the economic growth effects between community colleges and baccalaureate colleges. The authors used panel data from the states and 26 birth cohorts to separate the economic benefit of four-year sector education from two-year sector education. The authors attempted to capture the nearness of the education to the technology frontier by using personal income and patents. The technology frontier means those geographical locations where innovation is translated into patents. They reasoned that in states near the technology frontier, personal income will reflect market *innovation*, while in states far from the frontier, personal income will reflect market *imitation*. They also isolated the impact of federal earmarks for research by using the presence of a legislator on the federal appropriations committee. Earmarked appropriations through federal committee work are limited to research. Legislators cannot get earmarks for capital improvements like dormitories.

Their research generated four important findings. First, investments in research university education result in economic growth for the state when the state is close to the technology frontier (Aghion, et al., 2006). The technology frontier refers to the location of technological innovation. Investments in research university education do not result in economic growth for the state in states that are far from the technology frontier. Specifically, the authors found an "additional research degree holder lowers the per-employee growth rate 0.346 percentage points for a state far from the frontier" (p. 52). The title of the article, "Exploiting States' Mistakes to Identify the Causal Impact of Higher Education on Growth," comes from this finding. The mistake Aghion, Coustan, Hoxby, and Vandenbussche (2006) are referring to is far-from-the-frontier state investment in research at the university-level with the expectation that it will result in economic growth. Considering the sizable number of studies that indicate positive regional economic growth from funding directed at research universities (e.g. Goldstein & Drucker, 2006; Drucker & Goldstein, 2007), this finding is perplexing; however, it may be that while the economic benefit to the regional economy is positive, the benefit to the state as a whole is negative.

Second, graduate-level education only results in economic growth in states that are near to the technology frontier (Aghion, et al., 2006). For states that are not near to the frontier, the authors found a significant amount of migration or *brain drain* from that state. The *brain drain* effect is noted also by Goetz and Rupasingha (2003).

Third, investments in two-year sector education resulted in economic growth in states that were far from the frontier. This finding is especially relevant for this study, because the Midwestern state in this study is not a frontier state. As such, it is reasonable

to conclude that additional funding to community colleges would generate economic growth in this state. As well, of the articles reviewed for this study, only Aghion, Coustan, Hoxby, and Vandenbussche (2006) attempted to isolate the economic benefit of the two-year sector from the four-year sector.

Fourth, "an additional baccalaureate degree holder has little effect on growth either in at-the-frontier or far-from-the-frontier states," and an "additional lower postsecondary degree attainment has no statistically significant effect on growth either in at-the-frontier or far-from-the-frontier states" (p. 53). This finding has important implications for outcomes assessment. The indirect effects of spending on education may be as important to economic growth as increasing the number of degree-holders.

One indirect effect may be economic growth from *some college*. Economic growth is often measured by the collective increases in individuals' income. Therefore, understanding occupational changes by educational attainment offers some insight into economic growth through increases in human capital. Hecker (2005), in research funded by the U.S. Bureau of Labor Statistics, predicted occupational employment to 2014. When dividing employment growth by education, Hecker used six categories. Four of those categories are "high school/*some college*," "*some college*," "high school/*some college/college*," and "*some college/college* (emphasis added)." Seventy-one percent of job growth will occur in these four categories for which "some college" will be an adequate amount of education. Again, this suggests the indirect effects of college are important to economic growth.

Non-profit reports like *Hitting Home* (Reindl, 2007), *Education Pays* (College Board, 2006), and *The Investment Payoff* (Institute for Higher Education Policy, 2005)

focus on degree attainment almost exclusively. Specifically, *Education Pays* (College Board, 2006) found:

the difference in earnings between those with some college education but no bachelor's degree and those who have completed a four-year degree has increased over time and is now about 37 percent for men and 41 percent for women (p. 2).

While this finding is accurate in the aggregate, there may be some important complications hidden within such findings. For instance, Goetz and Rupasingha (2003) used county-level data to study the relationship between personal income and education across the states and across urban and rural areas. They found a positive association between income and education across the board. In a much smaller study of California community colleges, Sanchez, Laanan, and Wiseley (1999) find a positive association between income and educational attainment. However, the geographic region for the California study is urban. An important complication may be the urban/rural divide. Goetz and Rupasingha (2003) found, "in the rural South, ...there is little incentive to attend college because the incremental returns on college are not much higher than are the returns on a high school diploma" (p. 346). For the northeast, northcentral (Missouri), and southern census regions, the returns on higher education are twice as large in urban areas as in rural areas. Although Goetz and Rupasingha (2003) do not include the cost of college in their model, it would be interesting to see how the cost would impact the return on education in rural America.

In sum, the indirect effects of having attended some college may be important to economic growth. This does not mean that education is not a valuable investment, but a broad-stroke approach to educational investment may not have the economic payoff implied by *A Test of Leadership* (U.S. Department of Education, 2006).

Education Borrowing and the Credit Market

The studies thus far have been about the human capital side of economic growth; however, because some portion of higher education is commonly funded by private borrowers, there are also implications for the credit market. The risk involved in loaning money to students on the basis of their future earnings can be quite great. As such, the interest rates on education borrowing are high. The federal government offers grant aid and subsidized student loan aid – meaning the federal government pays part of the interest which accrues on the loans; however, the financial barriers to college are rising (Advisory Committee on Student Financial Assistance, 2006). In a report to Congress titled *Mortgaging Our Future: How Financial Barriers to College Undercut America's Global Competitiveness*, the Advisory Committee on Student Financial Assistance reported that during the current decade between 1.4 million and 2.4 million students will not earn a bachelor's degree because of financial barriers. The committee calculated the net price of college which includes tuition, fees, and living expenses minus grant aid. They noted that in 2000 the net price of college was \$7,500 dollars, which represented 75% of income for the lowest income families. The committee also found that among parents, 80% of low-income and 66% of moderate income parents were "very concerned" about college costs. Among students, 71% of low-income and 59 percent of moderate-income students were "very concerned" about college costs. These concerns translate into indirect effects like low academic motivation to prepare for college. Further, Dowd and Coury (2006) found that student borrowing had a negative effect on student persistence at community colleges. The Advisory Committee on Student Financial Assistance (2006)

speculated that the cost of the four-year sector negatively impacted transfer from the two-year sector to the four-year sector.

Despite these findings, at public two-year colleges 37% of full-time undergraduates had zero net tuition (Berkner, Wei, Griffith, 2006), and 26% of full-time undergraduates in the four-year sector had zero net tuition. The net tuition at two-year institutions was 1,200 dollars. The net tuition at the four-year sector was 3,500 dollars – almost three times that of the two-year sector. Although these numbers make college appear affordable, they only reflect tuition. At the two-year college sector, the average student loan among full-time undergraduates is 4,100 dollars. At the four-year public sector, the average student loan among full-time undergraduates is 5,800 dollars, and at the four-year private sector, the average student loan among full-time undergraduates is 7,900 dollars. Clearly, students are using borrowing to pay for more than just tuition costs, and they are borrowing more and more (Advisory Committee on Student Financial Assistance, 2006). These trends make the findings concerning the relationship between college completion and income in different geographical areas particularly important to this study.

As well, both governmental reports cited (Advisory Committee on Student Financial Assistance, 2006; Berkner, Wei, & Griffith, 2006) advised increased government aid for college. Yet, some economic literature has highlighted the dangers involved in this type of funding. To begin, Galor and Zeira (1993) note that there is a causal relationship between inherited wealth and investments in human capital especially through education. They emphasize that one impact of wealth distribution is the level of investment in human capital. In other words, Galor and Zeira argue that a broad middle-

class is particularly important to maintain investments in college education. When people inherit enough wealth to pay for college, they attend college. When the cost of college is high, those with little or no inherited wealth do not attend. However, Galor and Zeira do not suggest the government should step in and fund college; rather they argue for economic policies which ensure a distribution of earnings that will result in a broad middle-class. Hendel, Shapiro, and Willen's (2005) work explained the importance of this distinction. They found that government-supported aid for college increases income disparity because if students are high-ability and poor, merit aid will allow those students to go to college, but students who are low-ability and poor will not go to college. The existence of government aid in the student loan market increases the premium on skills making a college education even more valuable to earnings, and the lack of one even more detrimental to earnings – in other words, increasing income disparity. Both of the governmental reports above advise an increase in government-sponsored aid (Advisory Committee on Student Financial Assistance, 2006; Berkner, Wei, Griffith, 2006); however, this research demonstrates that such aid – particularly merit-aid – could impede economic growth and make obtaining a college degree *more difficult* particularly for adult students such as those in this study seeking a societal "do-over." Rather than concluding the government should let market forces prevail, researchers must find ways to use policy creatively to allow non-traditional students avenues for college attendance.

Complicating the education and growth equation is income disparity. The Hendel, Shapiro, and Willen (2005) study argued that the way we finance college (i.e., government aid) can have an important impact on income disparity. In addition, income disparity can have an important impact on economic growth. In general, economists

believe that in countries where income is more equally distributed economic growth is greater (Galor & Zeira, 1993; Voitchovsky, 2005). The complexities in the income disparity/growth relationship are important to this study.

In a comprehensive study of the middle-class, Weller (2006) found that spending on housing, health care, and education is outpacing increases in earnings. Middle-class families are finding it more difficult to pay for these basic needs. For the middle-class real earnings declined 4% between 2000 and 2004. For the low-income families, real earnings declined 7.9% during the same time frame. For high-income families, real earnings declined 2.9 percent. Not only has the United States had an increase in income disparity, but countries around the world are experiencing similar increases (Stewart, 2000; Weller, 2006; Weeden, Kim, Di Carlo, & Grusky, 2007).

Income disparity in rural America may have an especially negative impact on economic growth. Fallah and Partridge (2007) use county-level panel data to estimate the impact of income disparity on economic growth. Income disparity in urban areas is positively associated with growth (Fallah & Partridge, 2007). The authors speculate that this is due to labor specialization. Neurosurgeons do not locate in rural areas. Agglomeration economies benefit from labor market and specialization matching. Fallah and Partridge also find that income disparity is negatively associated with growth in rural areas. They hypothesize that the social capital implications in rural communities are especially pronounced, and punishing to those at the low-end of the income spectrum. The study highlights the potential positive impact on economic growth in rural areas through the education/growth mechanism.

In a similar study, Voitchovsky (2005) looked at household surveys across countries to determine the impact of income disparity on economic growth. She found at lower income levels disparity negatively impacts economic growth. Voitchovsky (2005) like Bornschie, Herkenrath, & Konig (2005) argued that social unrest negatively impacted economic growth at the low-end of the income distribution. Although Bornschie, Herkenrath, & Konig (2005) used protests as a measure of social unrest, Fallah and Partridge's (2007) social capital theory relates to unrest in that both reflect the negative impact of cultural ideology on economic growth at the low-end of the income spectrum. Voitchovsky (2005) also found that income inequality at the high-end of the income distribution positively impacts economic growth speculating that this growth is related to labor specialization as did Fallah and Partridge (2007).

The section on human capital and economic growth and this section on education borrowing and the credit market have highlighted the following important considerations for this study.

- In general, the United States has strong output elasticity relative to education.
- Much of the regional research on the economic impact of higher education has not considered community colleges in statistical models.
- Investments in community colleges result in positive economic growth in rural areas (or areas far from the technology frontier).
- Income disparity results in negative economic growth in rural areas.
- College education in an urban area has twice the income return as one in a rural area.
- Important indirect effects positively impact economic growth (e.g., social capital).

- Trends in college funding – merit aid – may make it more difficult for non-traditional students to attend college.

In sum, increasing college attendance and degree attainment among low-income mothers will only result in economic growth if the contextual relationship between increases in human capital and economic growth is considered when developing policy interventions.

College Factors

This section of the literature review examines research related to college factors important to this study. In part, this section examines twelve quantitative studies related to typical outcomes measures: *persistence*, *associate's degree attainment*, *transfer*, and *baccalaureate degree attainment*. Eight of the studies utilize high level statistical tests, generally some type of regression method. Three of the studies, Berkner, He, and Wheelless (2007), Berkner and Horn (2003) and Wei, Nevill, and Berkner (2005) are descriptive studies. All of the studies except one make use of one or more national datasets (see Table 1). To get a sense of the representativeness of the datasets, I will briefly describe each.

The National Educational Longitudinal Study of 1988 (NELS:88) sampled a nationally-representative set of eighth-graders about school, work, and home experiences. The sample was resurveyed four times: 1990, 1992, 1994, and 2000. Because the dataset offers information about high school experiences, the researchers are able to analyze the college preparedness of students. Also, the dataset represents randomly sampled eighth-graders, so it is not representative of community colleges (Alfonso, 2006).

The National Postsecondary Student Aid Study (NPSAS) is a nationwide study of students in enrolled postsecondary institutions. Its purpose was to determine how families pay for college. Unlike the NELS:88, NPSAS is designed to be representative of all institutional types, including public and private not-for-profit, for-profit institutions, community colleges, and baccalaureate institutions.

The Beginning Postsecondary Students Longitudinal Study (BPS) follows students who were surveyed for the NPSAS. The purpose was to determine persistence and completion of postsecondary programs. As well, questions were asked about the relationship between work and school. Two studies reviewed used the NPSAS, five studies utilized the BPS. Both of the datasets follow the same sample of students.

The Integrated Postsecondary Education Data System (IPEDS) collects data from the institutional perspective, as opposed to the individual perspective. The IPEDS dataset is not a sample. The IPEDS data set includes information from all credit-granting postsecondary institutions that are open to the general public. Data is collected across a range of topics, including enrollment, financial aid, and graduation rates.

Wassmer, Moore, and Shulock (2004) make use of data collected by the California Community Colleges Chancellor's Office. The data is collected on first-time, full-time freshmen students at California community colleges. The Wassmer, Moore, and Shulock (2004) study is included because of the approach to analyzing findings across full-time and part-time students.

Table 1

Databases used in Literature Reviewed

<u>Authors/Dataset</u>	<u>NELS:88</u>	<u>NPSAS</u>	<u>BPS</u>	<u>IPEDS</u>	<u>California</u>
Alfonso, 2006	X				
Bailey, et al., 2006				X	
Berkner, et al., 2007			X		
Berkner & Horn, 2003		X	X		
Bozick & DeLuca, 2005	X				
Dougherty & Kienzl, 2006	X		X		
Dowd & Coury, 2006			X		
Horn, Cataldi, & Sikora, 2005	X	X	X		
Rowan-Keynon, 2007	X				
Stratton, O'Toole, & Wetzel, 2007			X		
Wassmer, Moore, & Shulock, 2004					X
Wei, Nevill, & Berkner, 2005		X			

In sum, three nationally representative databases from the student perspective, one database from the institutional perspective, and one database from a state perspective are represented in the twelve studies reviewed. The findings across the studies are remarkably consistent. Considered together, the amount of replication between findings is persuasive.

In one or more of the reviewed studies, each of the individual characteristics listed below indicates the individual is less likely to persist, transfer, earn an associate's degree, or earn a baccalaureate degree than is an individual without the characteristic.

- initial enrollment at a community college
- delayed enrollment
- non-traditional age
- parental status
- less prepared for college
- few financial resources
- part-time enrollment

All of the women I studied were parents and had limited financial resources. In addition, the remaining individual characteristics were represented in one or more of the

cases I collected. The rest of this section describes findings about these characteristics from the twelve quantitative studies, as well as integrating findings from other studies relevant to the characteristic.

Beginning at a Community College

Almost half of all undergraduates are community college students (Knapp, Kelly-Reid, & Whitmore, 2006). Unfortunately, studies correlating degree attainment to this institutional sector indicate that students beginning at a community college are less likely to persist and graduate than students beginning at a baccalaureate institution (Alfonso, 2006; Stratton, O'Toole, & Wetzel, 2007). Research indicates that larger community colleges have lower graduation rates (Bailey, Calcagno, Jenkins, Leinbach, and Kienzl, 2006). As well, community colleges with larger proportions of female students and larger proportions of part-time students have lower graduation rates (Bailey, et al., 2006). Berkner, He, Mason, and Wheelless (2007) found that of students entering postsecondary education at a community college first, 21% had not attained a degree and were not enrolled in another institution after three years, while, in the four-year sector, only seven percent of students had not attained a degree and were not enrolled in another institution after three years.

Research related to rural community colleges indicates that this student group is unique. For example, Katsinas, Alexander, and Opp (2003) found that rural community college students have more non-tuition related expenses than do students attending urban or suburban community colleges. Rural community college students are more likely than four-year college students to be financially responsible for themselves and their

dependents. These realities may partially explain the low baccalaureate graduation rates for students attending rural community colleges (Alfonso, 2006).

In general, beginning at a community college means those students who intend to obtain a baccalaureate degree will need to transfer. Dougherty and Kienzl (2006) sought to understand transfer rates by considering social background. Their research indicated that community college students who look most like traditional baccalaureate college students are most likely to transfer (Dougherty & Kienzl, 2006). They found that older students and students with fewer financial resources are less likely to transfer. Finally, Dougherty and Kienzl (2006) did not find a statistically significant difference between transfer rates based on gender.

In a qualitative study based on interviews with transfer students, Townsend and Wilson (2006) found that advising at both institutional types may be critical to integrating community college transfer students into the baccalaureate institution. Students need to understand how institutional mission impacts the behavior of faculty members and students. Similarly, in a quantitative study on transfer students at the University of Massachusetts Amherst, Berger and Malaney (2003) found that those students who are best informed about the baccalaureate sector are most successful at the transfer institution.

Delayed Enrollment, Age, and Parenting

Working adults represent one-third of the undergraduate population (Berkner & Horn, 2003). Berkner and Horn (2003) reported that 85% of adults entered college to "enhance their position in the labor market," and 89% marked "personal enrichment" as an important factor (Berkner & Horn, 2003). Understanding what is meant by "personal

enrichment" might be a key to understanding adult decision-making relative to college (Townsend, 2007).

Adults delay enrollment for various reasons, including child care, financial resources, and academic weaknesses (Bozick & DeLuca, 2005; Horn, Cataldi, Sikora, 2005; Rowan-Kenyon, 2007). One-fifth of students who delayed college no more than one year, and one-third of those who delayed college enrollment between two and four years had child care obligations (Horn, Cataldi, & Sikora, 2005). Second, students who delay enrollment have fewer financial resources (Bozick & DeLuca, 2005; Rowan-Kenyon, 2007), and third, students who delay enrollment are less prepared for college (Bozick & DeLuca, 2005; Horn, Cataldi, & Sikora, 2005; Rowan-Kenyon, 2007) as measured by high school coursework and test scores. As well, students who delay enrollment are more likely to begin at a community college (Bozick & DeLuca, 2005; Horn, Cataldi, & Sidora, 2005). This decision may reflect a feeling of being under-prepared for college and needing a comfortable place to begin, or it may reflect being unable to pay for a baccalaureate institution (Townsend, 2007). Finally, delayed enrollment is negatively correlated with transfer (Dougherty & Kienzl, 2006; Wassmer, Moore, and Shulock, 2004) with baccalaureate degree attainment (Bozick & DeLuca, 2005), and with attainment of any postsecondary credential (Horn, Cataldi, & Sikora, 2005).

Half of all independent students are parents, and one-fourth of all independent students are single parents (Wei, Nevill, & Berkner, 2005). Being a parent and a student is negatively associated with transfer (Dougherty & Kienzl, 2006), non-persistence in the community college sector (Berkner, He, Mason & Wheelless, 2007) and non-persistence

in higher education generally (Stratton, O'Toole, & Wetzel, 2007). A parent's college commitment is often secondary to family and work (Berkner & Horn, 2003; Wassmer, Moore, & Shulock, 2004). Wei, Nevill, and Berkner (2005) noted that although it is often age that determines independent status, independent students are most clearly different from their dependent counterparts in their family and work responsibilities.

As well, independent students often struggle with finances. Of all independent students enrolled in a community college, twenty-four percent live below 125% of the poverty threshold, yet only 1.8% received cash welfare payments and only 2.5% received food stamps (Wei, Nevill, & Berkner, 2005). In addition, of single-parents enrolled in a community college, 43.3% lived 125% below the poverty threshold, while 17.4% of married parents lived 125% below the poverty threshold (Wei, Nevill, & Berkner, 2005). In the community college sector, many parents enrolled in college have significant financial strain.

Researchers have also demonstrated that adult student form their educational commitments based on their interactions with the institution and form their self-concept as a student through interactions in the classroom (Gigliotti & Gigliotti, 1998; Graham & Gisi, 2000; Kasworm, 2003). As such, they may be important to adult decision-making about college.

Less Prepared for College

Being less prepared for college is most clearly correlated with delayed enrollment (Bozick & DeLuca, 2005; Horn, Cataldi, & Sidora, 2005; Rowan-Kenyon, 2007). Being less prepared is also negatively associated with transfer from the community college and to the baccalaureate institution (Dougherty & Kienzl, 2006; Wassmer, Moore, &

Shulock, 2004). However, one reason for the negative association with transfer rates is that those who are less prepared are more likely to choose to pursue vocational degrees (Doughery & Kienzl, 2006; Horn, Cataldi, & Sikora, 2005). Researchers often assume that choosing a vocational major is a less than optimal decision for the student.

However, Attewell and Lavin (2007) demonstrated in their longitudinal study that choosing a vocational major may have positive income benefits even compared to baccalaureate degree attainment. Their study using CUNY (City University of New York) and NLSY (National Longitudinal Study of Youth) data, considered, in part, the impact of degree and major on earnings. Attewell and Lavin's findings are important to understand the potential error in outcomes assessments based on degree attainment and transfer. According to the authors,

CUNY women A.A. graduates who majored in health or social services earned significantly more than B.A.s who were education majors, and no less than any of the other B.A. majors. Indeed, with other variables controlled, A. A. degrees in health and social services produced earnings as high as those with postgraduate degrees in education and in arts and humanities. So although it is true in the aggregate that credential level is linearly associated with earnings, when credentials are disaggregated by major, a more nuanced picture is revealed. These effects of major were not as strong in the national NLYS data, but here, too, some A.A. fields yielded payoffs equal to earnings of some B.A. majors. (p. 44)

Further, Attewell and Lavin (2007) specifically countered the argument that those students who are less prepared are not benefiting from community college education. They wrote, "[i]f admissions policies had reflected that viewpoint, nearly half of the men and a third of the women who actually attended community colleges in the national sample would not have been able to do so" (p. 188). In short, being less prepared for college, may mean starting at a community college and pursuing a vocational degree, but these choices may also translate into increased earnings for those at the low end of the

socioeconomic scale, further translating into economic development through community college education.

Fewer Financial Resources

Not surprisingly, having fewer financial resources is negatively correlated with delayed enrollment (Bozick & DeLuca, 2005; Rowan-Kenyon, 2007). In addition, students with fewer financial resources are more likely to drop out of higher education (Stratton, O'Toole, & Wetzel, 2007), as well as being less likely to transfer (Dougherty & Kienzl, 2006; Wassmer, Moore, & Shulock, 2004). As well, students from low-income families have fewer study groups, spend less time studying, have a lower gpa, and work more hours (e.g. Walpole, 2003). As a result, researchers often question whether offering more or different financial information would increase enrollment or retention among those with fewer financial resources.

Specifically, Dynarski (2003; 2002) has used the elimination of Social Security student benefits and data from the Georgia HOPE program to study the effect aid has on the decision to enroll in college. In both studies, she concluded that aid does positively impact enrollment; however, the impact of the aid does not always benefit low income and minority students. Seftor and Turner (2002) used data generated through the Current Population Survey administered by the U.S. Census Bureau to consider how federal aid impacts older students' decision to attend college. They found federal aid has a significant impact on the enrollment decisions of older students.

The impact of aid on persistence and graduation has also been studied. Dowd and Coury (2006) considered the impact of loans on persistence rates at community colleges using BPS data, and found that loans have negative impact on persistence, but no effect

on degree attainment. In studying the impact of merit-aid at the University of Oregon, Singell (2003) concluded that merit-based aid negatively impacts the graduation rate of low-income students. Paulsen and St. John (2002) used NPSAS data to consider class reproduction versus educational opportunity by analyzing persistence. For adult students in poverty, they concluded that women are less likely than men to maintain continuous enrollment. The authors speculated that this result is due to family responsibilities, which take precedence over school. Paulsen and St. John (2002) conclude that for low-income women, especially mothers, the postsecondary system functions as a "class-based constraint" that discourages educational attainment.

In general, the research suggests that enrollment, persistence and graduation are impacted by the type and amount of aid. In a qualitative study on the impact of grant aid to low-income students, St. John (2006) wrote that "the consequences of unmet need are serious, potentially inhibiting preparation as well as enrollment and persistence" (p. 1616). This quote points to the intertwined nature of preparation, financial resources, enrollment and persistence.

Part-Time versus Full-Time Enrollment

Being enrolled part time has been negatively correlated with transfer (Dougherty & Kienzl, 2006) and degree attainment (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). Stratton, O'Toole, and Wetzel (2007) sought to separate the effects of part-time enrollment from the effects of full-time enrollment. They found that while persistence was negatively impacted by delayed enrollment, academic performance, parental education, and income for full-time students, the impact of these characteristics on part-time students was much smaller. Specifically, part-time student persistence was not

impacted by delayed enrollment. As well, "marriage and child related factors are much more closely associated with attrition for full-time as compared to part-time students" (p. 477). Likewise, using a thirty-year time frame, Attewell and Lavin (2007) found that graduation rates among low income mothers were much higher than is often suggested by research over a six year or ten year time frame.

College Factors Conclusion

Researchers studying poverty commonly note that poverty runs along race lines: African American, Latino Americans, and American Indians are more likely to be in poverty than other races; however, no causal relationship exists between race and poverty. People are not poor because they are black; rather, it is likely that discriminatory practices by employers and credit-granting agencies impact the chances African American, Latino Americans, and American Indians have to find opportunities that will raise their income above poverty. In higher education research, the same can be said of being older and a parent. Mothers do not drop out of college because they have children; rather, a convergence of institutional influences impacts a parent's opportunities to be successful in college. Higher education research has demonstrated that students who are older, parents, and low-income are more likely to drop out, but research has not adequately described the convergence of institutional influences that causes parents to make the decision not to re-enroll.

Education and Low-Income Mothers

This section of the literature review discusses research related directly to the population under study: low-income mothers in postsecondary education. In 2006, the United States poverty threshold for a mother and two children was 16,242 dollars a year

(U.S. Census Bureau, 2007). Thirty-six percent of single female householders live at or below the poverty threshold (CPS, 2007), and the United States has the highest childhood poverty rate of any industrialized country (Coleman & Kerbo, 2007). In addition, low-income mothers in higher education are a fairly sizable group of students. Wei, Nevill, and Berkner (2005) reported that 24% of independent students at community colleges reported living below 125% of the U.S. Census Bureau poverty threshold for a family of four (\$21, 286). Researchers study whether earning a degree will impact the socioeconomic status of poor women.

Pandey, Zhan, Youngmi (2006) sought to study the impact of education on poverty for mothers, both single and married. They used the 2000 National Longitudinal Survey of Youth (NLSY79). The survey began in 1979 and interviewed participants thereafter in 1994, 1996, 1998, 2000, and 2002. The dependent variable used was income-to-poverty, and the independent variable was educational attainment. The 2001 poverty rate for single householders with no high school diploma was 56.4%, with a high school diploma but no college was 33.6%, with some college but no bachelor's degree was 21.6% and with a bachelor's degree or more was 10.1 percent. Considering these numbers, it is no surprise that using a univariate analysis, and a bivariate analysis, the authors find having a degree statistically significantly reduces the likelihood of poverty for both single and married mothers. In fact, the authors concluded, "[t]his study shows that we can reduce poverty among women with children through a college education especially among women that are motivated to pursue their education" (p. 500).

Within this large finding are several important details. For single and married women, being a parent was *negatively* related to economic status, as well as the length of

parenthood as measured by the number of children (Pandey, Zahan, Kim, 2006). Poor single mothers had more children and those children were younger. Conversely, for mothers, both single and married, being employed was positively related to economic status. Further, single mothers had a lower educational status than did married mothers. As well, far more non-poor married mothers had a bachelor's degree than did poor married mothers (Pandey, Zahan, Kim, 2006). Having some college significantly reduced the likelihood of being in poverty for both groups. Being married substantially reduces the risk of poverty, as does having a degree (Pandey, Zhan, & Youngmi, 2006).

Unfortunately, low-income women seem to question their ability to complete an education. In a mixed-methods study of 69 low-income women enrolled in a voluntary educational training program purposed to help women form educational goals, Bullock and Limbert (2003) found that these women expected college to result in a middle-class status; however, they were uncertain that postsecondary education was open to them and their children.

Several studies indicate that despite having doubts about their ability to complete an education, low-income women are strongly motivated by the desire to be a good role model for their children (Attewell & Lavin, 2007; Haleman, 2004; Jennings, 2004; Luttrell, 1997). Through their thirty-year longitudinal study of low-income women, Attewell and Lavin (2007) found that low-income women wanted to model being a good student who values education for their children. Likewise, Haleman (2004), in an ethnographic study of 10 women receiving public support and single mothers, found the women wanted to model educational attainment for their children. Jennings (2004) found that not only did low-income women desire to model education for their children; they

used education as a vehicle for resisting negative images often applied to the poor. The low-income women in the studies seem to believe that their example will influence the future decisions of their children, and their beliefs seem to be corroborated by some research which indicates that children of welfare recipients have higher educational aspirations when their mothers attend college (Center for Women Policy Studies, 2002).

Research clearly demonstrates that earning a degree will draw low-income women out of poverty (London, 2006; Pandey, Zhan, & Youngmi, 2006); however, these same women wonder whether they are welcome in postsecondary institutions (Bullock & Limbert, 2003). For low-income women education is both a vehicle for resisting negative images and a model for their children (Attewell & Lavin, 2007; Haleman, 2004; Jennings, 2004; Luttrell, 1997).

Prior to the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), Temporary Assistance to Needy Families (TANF) or government welfare, which is a direct-payment cash subsidy, was used by many low-income women to pay for living expenses while attending college (Shaw, 2004). However, with the passage of PRWORA, the welfare subsidy ceased to be a route to college for low-income women (Shaw, 2004). The next section is a review of the literature about college access through welfare and the impact of PRWORA on college attendance by low-income women. Because Temporary Assistance to Needy Families (TANF) is no longer a route to college, it is not used as a boundary in this study; however, the welfare example provides an illustration of policy studies that impact low-income mothers.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 cut the cost of the welfare entitlement grant in half, cut the number of recipients in half, and eliminated much of the monetary support for women seeking postsecondary education (Shaw, 2004). PRWORA changed the rules for direct payment welfare or TANF. In this section, I will review some of the literature concerning PRWORA; however, TANF is no longer a route to higher education for low-income mothers (London, 2006; Shaw, 2004).

Shaw (2004) utilized policy documents and interviews to understand the impact of the work-first philosophy that drove passage of PRWORA. Ninety-six percent of the welfare caseload is made up of women (Shaw, 2004), of which, 85% are single mothers. Forty-one percent of the women on TANF rolls have not graduated from high school, and 36% of the women on TANF rolls ended their education at high school or with a GED (Shaw, 2004). TANF is a policy directed at low-income women with little education. Shaw (2004) identified four disincentives to enroll in higher education in the “work-first” philosophy driving passage of PRWORA. First, the act required welfare recipients to fail to find work before enrolling in school. Second, the act put a cap on educational pursuits at 30% of the state’s welfare caseload. In other words, a state can have no more than 30% of the individuals receiving TANF enrolled in educational programs at one time. Third, the education cap includes individuals working on a GED, and GED efforts are given precedence over college. Fourth, PRWORA took postsecondary education out of work calculations for TANF funding. As a result, the number of welfare recipients enrolled in college has dropped since the passage of PRWORA (Adair, 2001; Shaw, 2004). The work-first policies pressure poor women to find low-paying, inflexible jobs in lieu of

education (Kahn & Polakow, 2002; London, 2006). In sum, welfare is no longer a route to higher education.

Although many policy-makers have discussed the impact of PRWORA on higher education for low-income mothers, there appears to be no political will to re-address the reform. Although the old welfare did provide a pathway to college for some women, a great deal of research has demonstrated that old welfare was a disincentive to work, and the new "work first" philosophy is a response to the disincentive to work demonstrated by researchers (e.g., Fording & Berry, 2007). Further, none of the higher education research I reviewed was quantitative research on the effect of old welfare on degree attainment. The question being, "Was old welfare a disincentive to degree attainment?" Rather, the research I reviewed considered enrollment in higher education, not degree completion. Without research demonstrating that old welfare led to degree completion, it is unlikely policy-makers will re-address the reform with an eye on higher education.

Conclusion

The Spellings Commission goals of access to higher education for all Americans and economic development through higher education (U.S. Department of Education, 2006) are good and admirable goals, and it would be hard to quibble with them. Accomplishing these goals means committing resources to the success of the disadvantaged populations in higher education, including low-income mothers.

Throughout this chapter, I argue that context matters in understanding institutions and individuals. For example, the mechanisms for economic growth depend on location: rural versus urban. Persistence and degree attainment are impacted by timing of enrollment, age, parental status, socioeconomic status, and enrollment status. However,

concluding that context matters will not advance knowledge about how to provide access to higher education for more disadvantaged Americans. Knowledge is advanced by answering *how* – how does context matter? This multiple-case study is an attempt to answer that question by describing the relationship between the college-going decisions related to access, persistence, completion, and transfer made by low-income single mothers attending a rural Midwestern community college and the federal, state, and local policies they use to manage their economic circumstances.

Chapter Three

RESEARCH METHODS

Introduction

The Spellings Commission report named providing life-long access to higher education and giving individuals economic opportunity through higher education as goals for the institution of higher education (U.S. Department of Education, 2006). Policy makers assume education leads to economic opportunity for individuals; however, economic research has indicated that this relationship is complex and contextual (e.g., Aghion, Coustan, Hoxby, and Vandebussche; Fallah & Partridge, 2007; Voitchovsky, 2005). Alleviating rural poverty amongst mothers has proven a particularly difficult problem (e.g., Fisher, 2007). Yet, researchers have demonstrated that a post secondary education is a path out of poverty for low-income mothers (e.g., Pandey, Zhan, & Youngmi, 2006).

Using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

Chapter Three contains a description of the qualitative methods used in this study. Research design, participant selection, site selection, data sources and data collection, data analysis and trustworthiness, and ethical issues will be described.

Research Design

This study rests largely in the pragmatist paradigm. Creswell (2007) designated the pragmatist paradigm as "what works" thinking (p. 22). The focus in the pragmatist paradigm is on solving problems, making it appropriate for policy research. Pragmatists see research as socially, historically, and politically located (Creswell, 2007). As well, the economic theoretical framework necessitates that the study be carefully located in time, place, and context, so case study methodology works well in tandem with the economic theoretical framework of this study. Finally, pragmatists often employ both quantitative and qualitative methods (Creswell, 2007). Although this study exclusively employs qualitative methods, much of the literature the study rests upon is quantitative.

Stake (1995) noted that "the cases of interest in education and social service are *people* [italics added] and programs" (p. 1). In this multiple-case study, people are the cases of interest because of the economic development possible through providing a college education to poor mothers (Pandey, Zhan, & Youngmi, 2006). Yin (2003) said "[C]ase study is not either a data collection tactic or merely a design feature alone but a comprehensive research strategy" (p. 14). Yin (2003) named five applications of case studies. Four of those applications are used in the design of this study. First, case studies can "explore those situations in which the intervention being evaluated has no clear, single set of outcomes" (p. 15). The economic development framework used to analyze the data made it possible to view the outcomes of policies from the perspective of the

single-mother. In addition, Yin (1984) argued that a case study should involve cases that are "unusual and of general public interest" and "nationally important, either in theoretical terms or in policy or practical terms." The study of single-mothers is of general public interest because single-mothers are likely to live in poverty and struggle with poverty (CPS, 2007), and single mothers are both nationally and theoretically important because the theories of economic development used for this study are concerned with improving the economic circumstances of the poorest members of society.

Second, case studies can "describe an intervention and the real-life context in which it occurred" (p. 15). By using people as cases, this study describes the real-life context of important national policies like Pell grant and food stamps.

Third, case studies can "explain the presumed causal links in real-life interventions" (p. 15). In an article titled, *Five Misunderstandings About Case-Study Research*, Flyvbjerg (2006) argued that case studies should be used for theoretical generalizations and practical suggestions. Practical policy suggestions arose from this study that may be useful to community colleges, as well as state policy-makers. In the final chapter, both theoretical generalizations and practical suggestions are discussed.

Fourth, case studies can "illustrate certain topics" (p. 15). The issue questions for this study are named the topics under study. They are "What is the nature of the capabilities that low-income mothers believe they will gain or do gain by attending the community college?" and "How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education?" Likewise, for Stake (2006)

there are two types of cases: intrinsic and instrumental. Instrumental cases are studied because they highlight an issue. Using a multiple-case study method is most appropriate for instrumental cases (Stake, 2006), because it allows cross-case comparisons which strengthen the findings about the issues under study (Yin, 2003). As well, researchers can use multiple-case study analysis to move beyond the case and generalize theoretically (Stake, 2006; Yin, 2003). The cases under study here are instrumental since I go beyond the case in my findings to make assertions about economic development. As well, in an instrumental case study the issues are more important than the individual case (Stake, 1995).

In a study similar to the one conducted here, Shaw (2004) used case study to understand the connection between welfare reform and higher education. In Shaw's study, the case was the welfare reform act rather than people. Shaw made use of documents and interviews to conclude that welfare reform was a gendered policy that unfairly disadvantaged poor women. Shaw made both theoretical suggestions and practical suggestions. Like Shaw, this study makes extensive use of documents and interviews to arrive at findings. Using interviews and documents for case study work is common in higher education research (e.g. Connolly, Jones, & Jones, 2007; Shaw, 2004). Case study was an appropriate methodology for understanding how single mothers' college-going decisions related to access, persistence, completion, and transfer made by low-income single mothers were affected by the federal, state, and local policies they use to manage their economic circumstances.

This study is a multiple-case study. For Stake (2005) and Yin (2003), adding cases strengthens results; however, each case was studied individually without

considering other cases. Having finished analysis of the cases separately, I then performed a cross-case analysis. The case-study design that follows is intended to work for the singular case, as well as for multiple cases. The overall design of this study including issue and information questions is located in Appendix D.

Case studies are bounded systems (e.g., Creswell, 2007; Stake, 2005). This multiple-case study is bounded on three sides. First, all of the people studied were single mothers during a portion of their college enrollment. I focused on mothers because a mother's educational attainment is correlated to her child's educational attainment (Attewell & Lavin, 2007); therefore, a mother's education has a compounding impact on her personally and her children. However, as I collected cases, it became clear that single mother is too simplistic a parameter. The concept of being a single mother is more nuanced than I expected because women choose to separate, divorce, and remarry while enrolled in college.

Second, all of the mothers studied were low-income during some portion of their college enrollment. The criteria for determining low-income were women who fall under the U. S. Census Bureau threshold for poverty, women who received an Earned Income Tax Credit, and women who received a Pell Grant. If a potential participant met any one of the criterion during college enrollment then she was eligible to participate in the study. Of the participants in this study, eight women fell under the poverty threshold; nine women received EITC during some portion of college enrollment; and, nine women received Pell grant during some portion of college enrollment. Six of the women fell under the poverty threshold, received the EITC, and received the Pell Grant during their entire period of college enrollment.

The third boundary is that all of the women studied were or are enrolled in a rural community college. Rationales for this boundary are that adult women, particularly those with children, enroll in community colleges at high rates (Wei, Nevill, & Berkner, 2005) and rural poverty is higher than urban poverty (Fisher, 2007).

The multiple-case study approach makes possible the potential for replication of findings (Yin, 2003). A finding from a single study is not as reliable as a repeated finding from multiple studies. Yin (2003) emphasized the need for a rich theoretical framework when utilizing a multiple-case design. I sought to both literally replicate findings and theoretically replicate. Yin (2003) defined literal replication as finding similar results across cases, and theoretical replication as finding contrasting results for predictable theoretical reasons across cases. In this study, I located ten cases of single mothers attending college who meet the criteria of low-income. Through cross-case analysis, I was able to see literal replication across these cases, and theoretical replication across cases.

I utilized Seidman's (2006) three-interview sequence in this study. A full discussion of interviewing techniques follows in the section Data Sources and Data Collection Procedures.

Yin (1984) called a case study complete when three characteristics of completeness are accomplished. First, the boundaries of the case are given careful attention. In this multiple-case study, the boundaries of motherhood, financial need, and community college enrollment were carefully considered through the economic development lens (Dequech, 2002; North, 1990; Robeyns, 2003; Sen, 1999). The second characteristic of completeness is an exhaustive collection of evidence (Yin, 1984). For

this multiple-case study, I collected ten separate cases involving interviews and documents from multiple sources. The final characteristic of completeness is that non-research constraints do not determine the beginning or end of the case. For this multiple-case study, I was able to collect and analyze each source of evidence, and I did not feel rushed to complete.

Participant Selection

When qualitative sampling is based on the conceptual framework of the study, Patton (2002) labeled the process *theory-based sampling*, which is a concept-oriented version of criterion sampling. As discussed earlier, the mothers in my study fell into one or more of three criteria for low-income: met the U.S. Census Bureau definition of poverty during the time of enrollment; received an Earned Income Tax Credit during the time of enrollment; or received a Pell Grant to fund the cost of schooling.

As well, I chose women who are known to me. I have become familiar with their particular circumstances through my work as a faculty member at the college in this study; therefore, I was able to utilize *intensity sampling* (Patton, 2002), or sampling that seeks to determine the most illustrative cases of the issues under study. Initially, I constructed a list of 36 low-income women whose circumstances are known to me. Second, I reduced the list to the women I knew to be mothers. From there, I called the mothers and asked about marital status and willingness to participate in the study. If the women indicated an interest, we met to discuss the study and talk about her willingness to provide documents and to allow me access to transcripts and financial aid records. Fourteen women signed informed consent letters. Four of the women dropped out of the study after one or more interviews. Ten women completed the interview series.

Interview Sites

The locations of the interviews were negotiated based on convenience to the participant. In three cases, interview two and three were conducted at the same time. Although I was reluctant to concede to this, the participants indicated that their logistical constraints made a third meeting impossible. In other words, if they were to participate in the study, I would need to conduct interviews 2 and 3 together. Locations for interviews included restaurants, area public libraries with private meeting rooms, and the community college. The most common location was the library of the community college.

Data Sources and Data Collection Procedures

Patton (2002) wrote, "[T]he validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected...than with sample size" (p. 245). Yin (2003) identified the six most common types of evidence in case studies: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. For this study, I conducted interviews, collected documents, and conducted direct observations during interviews and in the college setting itself. When possible, interviews followed Seidman's (2006) three-interview sequence (see Appendix A for interview questions).

Documents were collected to confirm the appropriateness of the participant for the study according to the boundaries, to ascertain detailed information concerning policy participation, to confirm college enrollment dates and status over the time period studied, as well as to triangulate interview findings. I collected documents from multiple perspectives, and documents were a significant source of data for this study. After the

participant signed the letter of informed consent (see Appendix B for the letter of consent), I collected an Institutional Student Information Record (ISIR) for each year of enrollment. The ISIR is the federal document that results from the FAFSA (Free Application for Federal Student Aid). I collected institutional billing statements for each semester of enrollment, and award letters for each academic year. I collected college transcripts for each participant. The transcripts provided information about high school graduation or GED attainment, ACT or COMPASS scores, course grades, and degree attainment. These documents were obtained from the Financial Aid Department and the Business Office. All of the information contained in the documents is protected by the Family Educational Rights and Privacy Act (FERPA). As a result, participants were made aware that the letter of informed consent gave me permission to obtain copies of these FERPA protected documents. I utilized the public database for court records and searched for the court documents related to economic circumstances. I collected the court documents related to child support awards and lawsuits related to defaulting on loans or hospital bills. In addition, two women had criminal records for passing insufficient funds checks. Finally, I requested from the women themselves documents that were particularly relevant to their case. For example, Charlene had significant healthcare debt, so she brought billing statements from hospitals and doctor's offices. Chelcy brought her husband's death certificate indicating he had committed suicide, as well as W-2 forms and award letters for her college enrollment, because her earliest year had been partially purged from the institutional database. Marie and Rose brought statements from the Division of Family Services concerning food stamps and other types of support.

Finally, participant observations were made at the site of the interviews and recorded in field notes and observations were made at the site and recorded in field notes.

Each case had research questions of its own depending on the nature of the case (Stake, 2006). Before conducting interviews, I consulted document evidence heavily to prepare appropriate interview questions for that case. The interviews were digitally recorded and transcribed. The transcriptions were provided to participants for comment and correction.

Seidman (2006) recommended a three-interview series in order to place participants in their lived context, and to collect rich data (see Appendix A for an interview protocol) Prior to the first interview, I asked participants to fill out a survey covering demographic information, educational information, and policy information (see Appendix D). The first task during interview one was to review the responses to the survey and ask for any necessary clarifications. The responses to the survey were used to construct the interview questions for the second interview.

In this study, the first interview was a focused life history. During this interview in particular, the methodology of narrative inquiry was employed. A central question for this first interview was "What was life like before going to college?" I was interested in the narrative response. Seidman (2006) recommended asking "how" questions rather than "why" questions, so that the concrete nature of the how question will lead to a narrative reconstruction. As such, another important question for this interview will be "How did you come to enroll in the community college?" Both questions generally resulted in narrative responses, although two participants were reluctant to speak at length. Because the participants were known to me and I knew their personal histories before the

interview, I was able to prompt in such a way to elicit the storied response. After the digital recorder was turned off, Carol often related a more storied response to questions than she did when the recorder was turned on. I took notes on these responses.

The second interview focused on the details of the case (Seidman, 2006). I constructed interview questions based on the first interview and documents collected up to that point. The focus was on the lived policy experiences of the participant. Prior to the second interview, I located as many of the documents related to the case as possible, so I was able to ask questions about the documents as well. One reason this became important is that the billing statements listed small federal (e.g. Federal SEOG) grants and institutional scholarships that the women often did not list on the survey. In some cases, the women were not aware they had received the additional funding.

The final interview was a reflection on the meaning of the college experience and the policy experiences (Seidman, 2006). The intention was to determine the impact of policies on decision-making and meaning-making for the participant (see Appendix A for questions). The first question for this interview was "How would you describe yourself?" This proved to be a difficult first question. As a result, I re-arranged the questions to ask questions 2 through 6 before returning to question 1.

I attempted to schedule the interviews at three-day increments; however, this did not generally make sense to the participants given course scheduling is at two-day increments. Therefore, many of the interviews were scheduled at two-day increments. The shortest interview was seven minutes and the longest was forty-one minutes. The average interview time was 24 minutes. One strength of this study was that I was able to use my previous relationship with nine of the participants to build a rapport of trust

through the interview series. As a result, during the interview series and after the interviews, participants would stop in to relate another story or detail that they felt was relevant. These details were recorded in field notes. Seidman (2006) drew a comparison between the relationship between teacher and student, and the relationship between interviewer and interviewee saying that it is friendly, but not a friendship. The friendly exchange should be equitable in nature, meaning the interviewer must consciously negotiate issues of race, gender, class, and age during the interview process to build an equitable relationship. Because this philosophy of interviewing coincides with my philosophy of teaching, I believe I was able to build on my teaching relationship with the participants to create a professional, trusting, friendly rapport that led to information-rich cases for analysis.

Data Analysis and Trustworthiness

Each case was analyzed separately, and then cross-case comparisons were made. In his book, *Multiple Case Study Analysis*, Stake (2006) repeatedly described the tension between the case and the *quintain*. Stake uses the word *quintain* to capture the collection of cases that are assembled together with a purpose. It is important for the researcher to be aware of the tension between the individual case and the quintain understanding that they both compete and coincide (Ayers, Kavanaugh, & Knafl, 2003; Stake, 2006).

I did not utilize software designed for qualitative analysis; rather, analysis was performed by constructing a series of worksheets and by cutting and pasting with a word processing program.

Each case was analyzed using Yin's (2003) *individual-level logic model*. The purpose of this analysis was to understand why the women made the decisions they

made. One goal is to determine the outcomes, both intended and unintended, of the policy interventions used by the participant. In reporting individual cases, I wrote brief profiles or vignettes of each case, so that the individual cases were not lost in the multiple-case analysis (Stake, 2006).

For the purposes of cross-case analysis when there are few cases, Stake (2006) suggested a series of simple worksheets. For this study, I constructed worksheets based on the capabilities approach. For example, one worksheet collected data concerning academics together. Another worksheet pulled together the college finances for the cases. As mentioned earlier, in an instrumental case study the focus is on the issues, so the worksheet were used to capture both issue agreements and disagreements.

Lincoln and Guba (1985) developed four criteria for demonstrating the trustworthiness of interpretations and findings. Appendix E summarizes the research concerns related to the criteria for trustworthiness and the methods used to ensure trustworthiness despite the concern. The first criterion is credibility, meaning the data and findings should be believable. The primary activities used to ensure that the data and findings in this study are credible were prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy, and member checking.

Lincoln and Guba (1985) define prolonged engagement as being in the field for sufficient enough time to understand the culture, to be able to test for inaccurate information, and to build trust. This study was preceded by my eleven years of employment at the site of the study. Because of my employment history, I was able to negotiate the site easily, not appear as an outsider, and gain the trust of my participants.

However, the risk of too much prolonged engagement is what Lincoln and Guba (1985) call "going native" or being so much a part of the culture that I am unable to study it (p.303). Lincoln and Guba (1985) suggested that just being aware of the possibility is the greatest guard against it. In the case of this study, although I have had a long employment history at the site of the study, I have also been involved in graduate work at the University of Missouri-Columbia working with a scholar of the community college for the past five years. This involvement has provided a constant place of resistance to "going native." Through coursework and this study, I have been conscious of the ways in which the site of the study is like and unlike other community colleges.

The second method to ensure credibility is persistent observation. This is immersion in the data in order to "identify those characteristics and elements in the situation that are most relevant to the problem or issue" (Lincoln & Guba, 1985, p. 304). This term does not just mean presence at the site of study, but also immersion in the context under study. For this study, the Financial Aid office of the community college proved to be an especially important and relevant context. For each case, I went to the Financial Aid office to collect documents and discuss the meaning of documents. As Lincoln and Guba advised I approached observation with "an aura of skepticism" (p. 305).

Third, triangulation assures the reader that findings and assertions are solid, coherent, and consistence (Lincoln & Guba, 1985; Patton, 2002). Lincoln and Guba refer to Denzin's work on triangulation, so Denzin's more specific approach to triangulation was used for this study. Denzin (1978) defined triangulation as using a combination of methodologies. Specifically, he named four types of triangulation: data triangulation,

investigator triangulation, theory triangulation, and methodological triangulation. In this study, I triangulated using three types. First, data triangulation means that the researcher will "explicitly search for as many different data sources as possible" (Denzin, 1978, p. 295). For each case, I obtained documents from the community college, government agencies, and the court system. As well, participants provided documents from their own files. The second form of triangulation is investigator triangulation refers to the use of multiple investigators or evaluators (Denzin, 1978) which is similar to the Lincoln and Guba (1985) method of peer-debriefing. For this study, I met three times with a graduate student colleague, who has many years experience in higher education administration, to discuss analysis and findings. The third form of triangulation is methodological triangulation or collecting various types of data (Lincoln & Guba, 1985). In this study, I collected interviews, documents, and observations.

Negative case analysis involves refining findings until all the cases are accounted for in the findings (Lincoln & Guba, 1985); however, Lincoln and Guba argue it is too rigid a criterion to say that there should be no exceptions to a finding. For this study, negative case analysis involved deliberating seeking evidence of capabilities and institutional influences in the data and trying to understand instances where the expected influence did not occur.

Referential adequacy refers to the process of recording data for later analysis (Lincoln & Guba, 1985). At the time of Lincoln and Guba's work it was less common to record interviews; rather, field notes were relied upon. However, for this study, recorded data and documents provided substantial evidence to ensure referential adequacy.

Member checking ensured that each participant felt the interview data reflected what she intended to say in response to the questions. After interviewing was complete, all interviews were transcribed and provided to the participants. Generally participants responded briefly with a simple assent; however, two participants made additions to the interview data by writing notes on transcripts.

The criterion of transferability concerns whether the findings of a qualitative study hold in another context (Lincoln & Guba, 1985). Lincoln and Guba suggested using "thick description" (p. 316) or description that is sufficient enough to enable a reader to decide whether the findings hold in another context. Therefore, the findings for this study are described in detail with multiple quotes so that the reader is able to make decisions about the data.

The criterion of dependability is met when a researcher triangulates methodologically (Lincoln & Guba, 1985). As well, establishing an audit trail supports the criterion of dependability and confirmability (Lincoln & Guba, 1985). For this study, the raw data or the interview recordings were not retained on the digital recorder. Rather, both the voice files and the transcripts were retained on my personal computer and on a backup compact disc. Documents collected and field notes were put into notebooks organized by participants. Data analysis was performed through worksheets and word processing files. These files were kept in electronic form on my personal computer and on a backup compact disc. Finally, this report of the study is being kept in electronic form and paper form.

Ethical Considerations

Because the participants revealed personal matters through interviews and documents, ensuring that no harm or negligible harm comes to the participant is the utmost ethical standard (Clark & Sharf, 2007). Nearly all other ethical questions arise from this relationship of trust between researcher and the researched. Institutional Review Board (IRB) approval from the University of Missouri-Columbia Institutional Review Board was granted before I begin to collect data, but IRB approval does not mean there are no further ethical tensions to be considered. In this section, I will address three of those issues: informed consent, voice, and confidentiality.

First, the ideal of *informed consent* is utopian. The intention behind it is to ensure that field researchers do not violate the individual rights of participants (Eisner, 1998). However, at the moment of consent – when the participant signs the letter – the participant may not be fully aware of how she will feel about what is asked; therefore, informed consent should be viewed as ongoing and negotiated (Berg, 2004; Waldrop, 2003). For example, after signing a letter of consent, filling out the initial questionnaire and reviewing the interview questions, one potential participant said she just was not comfortable discussing personal matters while being recorded. As a result, I shredded all of her information and disposed of it. Patton (2002) said that interviewees will reveal events and feelings in an interview that they did not intend to tell. As such, telling a participant beforehand what she will be asked does not ensure she will not be harmed by the interview. For example, Marie did not intend to mention the sexual molestation her daughter experienced. After she had mentioned it, I followed up with a question, and she asked me to turn off the digital recorder. I did, and she told the story. She asked me not to

take notes, so I did not. For Marie, she was comfortable with the fact that it had happened being included in the study, but she was uncomfortable with the details of the events being recorded for the study. Therefore, those details are not part of the analysis. Initially I thought participants would be reluctant to share financial information, but I found they were more comfortable revealing financial data than they were revealing personal issues. Throughout the interview process and in data analysis, I strove to be respectful of their privacy.

Second, all researchers bring educational, political, and moral positions to their research; however, the researcher's desire to advocate for her positions should not silence the *voice* of the participant (Peshkin, 1993). Throughout the study, I strove to be self-reflective, so I would not confuse the voice of the researched with the researcher (Clark & Sharf, 2007; Stroobants, 2005). I did not anticipate how important this ethical consideration would be, but because this is an election year, election topics often came up before and after the interview. My political views were often different than the participants. I worked to negotiate this tension primarily by steering the conversation away from political topics. As well, as the women spoke of their life experiences, I tried to be careful not to take political positions relative to them -- either in the analysis or in the findings. In sum, misrepresenting the voice of the participant in the report is tantamount to fraud or deception, and no political disagreement justifies deception.

Finally, the researcher should maintain the *confidentiality* of the participants (Berg, 2004; Patton, 2002). This meant removing identifying information from the study and securing the data. As well, the researcher should be careful not to casually discuss research participants. However, I have made several presentations on the research as it

has proceeded. On these occasions, I used pseudonyms and focused the presentations on cross-case data with few identifiers or on the single-case of Rose. Prior to the presentations, I asked Rose permission to focus on her case. Rose reviewed the Powerpoint slides and the notes for the presentation before I gave it. This was important to me because of the inferences possible given my position at the college that the participants attend or attended.

Summary

In this study, I used a multiple-case study design to describe and explain individuals' reasoning and to replicate findings across cases. The participants were chosen using theory-based sampling and intensity sampling (Patton, 2002). Seidman's (2006) three-interview series was negotiated and used to capture participants' lived experiences with policy initiatives. Individual cases were analyzed using an individual-level logic model (Yin, 2003). Multiple-case analysis was accomplished using a worksheet model of analysis for locating case findings (Stake, 2006). For this study, I used Lincoln and Guba's (1985) four criteria for trustworthiness to ensure that the data and findings were well-founded. Finally, ethical issues, including issues of informed consent, voice, and confidentiality, were carefully reflected upon throughout the study (Berg, 2004; Clark & Sharf, 2007; Norrick, 2005).

Chapter 4

FINDINGS

Introduction

Policy-makers assume a causal relationship between economic growth and increased education (e.g., U.S. Department of Education, 2006); however, economic literature has indicated that this relationship is contextual and that geographical location is a particularly important determinant in economic growth and education relationship (e.g., Goetz & Rupasingha, 2003). Research has also indicated that single mothers are less likely to succeed in college than their traditional-aged counterparts (e.g., Berkner, He, Mason & Wheelless, 2007). When they do succeed, it is a path out of poverty (e.g., Pandey, Zhan, & Youngmi, 2006). Therefore, using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

The community college site in this study enrolls around 1,800 full-time students and 1,800 part-time students with two female students for every male student; the average age is 24. Fifty-one percent of the students are freshmen, and 22% of the students are sophomores. The remaining students are enrolled in non-credit or dual-credit coursework. The majority of students commute to the community college from other counties with some students commuting a significant distance to attend the school. For example, only

one participant in this study lives in the community where the community college is located, and two participants commute over 100 miles to attend the community college.

The first section of the chapter is a series of vignettes about each of the participants. The second section is a collective portrait of the participants. The third section describes the findings for the first issue question: What is the nature of the capabilities that low-income mothers believe they will gain or do gain by attending the community college? The fourth section describes the findings for the second issue question: How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education? The final section is a summary of the findings.

Vignettes

In this section, I present ten vignettes, each containing information on the participant's personal history, college-related decisions, occupational goals, and policy participation while enrolled in college.

Kate

After graduating from high school, Kate left home to live in a dorm and attend a baccalaureate institution about 90 miles from her home town. During her first semester away, her younger brother was diagnosed with brain cancer requiring surgery. Kate said, "So when he had brain surgery, I decided that I needed to go home and try to help her [mother] out, which was stressful." Kate dropped out of college without earning any college credits and returned home to help her single mother take care of her sick brother. When I asked her if her brother survived the surgery, she recalled,

No, my brother passed away. It's been six years now. He survived the surgery but had scar tissue and had a lot of seizures and stuff after that. They took a chunk of his brain and so he was a lot slower. He went back to school for awhile, but he was made fun of so terribly bad that he didn't want to stay, so we home schooled him for a certain amount of time. Right in that time, I started using a little bit [methamphetamines]. Not too heavy through all of that. I don't think it got really bad until after he had passed.

Kate met her daughter's father while caring for her brother, and he introduced her to methamphetamines. She said of her first experience with drugs:

I can remember the first time I ever seen it [methamphetamines]. I wanted to leave and never see them again, but they're very convincing and it just seemed like it would solve everything that I was feeling. The energy that I needed to keep up with everything basically was the main thing. The euphoric feeling that came with it because I hadn't had that in a long time. So, my first time of doing it, I loved it and wanted it.

Kate said this about her reaction to her brother's death: "So, I got very high and stayed that way for quite awhile – over a year pretty much. It got pretty constant – every day usage. At this point, I had my daughter. Her father was married." Her daughter's father supplied Kate with drugs, but the relationship soon fell apart. Kate moved in with another man because she needed a place to live. Her mother had a live-in boyfriend that Kate resented, so she no longer felt welcome in her mother's house. Kate's new boyfriend was married, a heavy drug user, and abusive to Kate. She described him as "very abusive...physically abusive, sexually abusive, mentally abusive." Kate's boyfriend bounced back and forth between Kate and his wife. After several days of continuous drug use and in a jealous rage, Kate drove her car into his house with her daughter in the backseat. She said, "I had a breakdown and realized that day, 'cause I had my daughter with me and what I was doing to her. So I left and put myself in treatment." The drug treatment program helped Kate decide to return to school, so when she finished the program, she enrolled in the community college and began work on her associate's

degree. Her boyfriend was forced into a 120-day shock treatment program for his drug use by an area judge. When he completed his treatment program, Kate allowed him to move in with her and her daughter. He began to use drugs again and to physically abuse Kate, so she dropped out of the community college. She said,

He would be gone three days at a time and come back in a psychotic episode. Then one day he choked me to the point of [my] passing out in front of my daughter and I left. I finally was strong enough to tell him that I didn't want him to come around again and got an order of protection about a week before I found out I was pregnant with my son.

Seven years after starting college as a traditional-aged freshman and pregnant with her second child, Kate began to take classes at the community college again. She took one summer semester off for maternity leave, but returned in the fall semester. Three years later, she earned an associate's of arts degree and transferred to a very selective public, liberal arts institution near her home town. She is earning a social work degree and planning to work in juvenile probation and parole. In talking about her vocational choices, Kate said, "I have a desire and passion to try to help our troubled youth. Mainly I want something good to come out of the bad that I have done. I don't want it to all have been for bad. Not sure where it's going to lead me exactly yet, but that's the point."

While enrolled in the community college, Kate has utilized 12 federal, state and institutional programs, including Pell Grant, federal subsidized loans, TANF, EITC, food stamps, subsidized housing, WIC, Medicaid, Workforce Initiative Act, and Head Start. She commented, "It's a struggle trying to figure out the right amount of work and still get the benefits I need to stay I school." Kate also talked about the stigma associated with using welfare programs. She said, "Absolutely there's a stigma with that. You should be

working harder and you shouldn't be asking for the handouts and you're probably in some trashy place, don't know how to clean type idea."

Rose

After graduating from high school, Rose left home to live in a dorm and attend a private religious college in another state; however, she continued a long distance relationship with her high school boyfriend. Rose said, "He would call on the phone saying he was holding a shotgun and needed me back. It was a really sick relationship from the get-go." Rose left school after successfully completing her first semester to be near her boyfriend. She returned home and enrolled in a local community college where she successfully completed another semester. Her boyfriend pressured her to marry him, so, at 18, she married her boyfriend and moved to another town. Rose took a secretarial position at a university where she "did really well." She said, "I went from secretary to administrative assistant within a couple of years." After having her first child, she had problems finding reliable care for her daughter while she was at work. Rose recalled,

I went through two different childcare providers while I was there and both of them.... I wanted to do better. I wanted to do it myself, so we wound up finding this house that had...it was a mother-in-law apartment is what it was advertised as, but it had a full kitchen and bath and two big rooms downstairs. So we bought the house and I opened the childcare program down in the basement. I had that open for 10 years.

Throughout this time period, Rose and her husband struggled. Rose observed,

It should have been a walk away situation. But I didn't. It seemed like every time...then I had [first daughter]. In '94 I had [first daughter]. In '98 I had [second daughter]. And every time I was about to go because it seemed like the kids were old enough...in '03 I had [son]. Every four years just when I thought okay I can leave with a three year old or whatever, I got pregnant again.

Rose described the marriage as "unhealthy" and "conflicted." She referred to her home as one where there was a significant amount of "screaming" and "door slamming."

Eventually Rose asked her husband to leave.

I asked Rose if education was on her mind during her ten years of running her daycare business and contending with her troubled marriage. She responded, "Loved it. So through this whole time, I loved teaching. I loved being with the kids. That's what I was all about." After Rose and her husband separated, Rose tried to gain employment outside her home; however, she was unsuccessful. As a result, she made an appointment at the Division of Family Services to sign up for aid. Rose said of that first appointment, "They asked did I want to go to school or did I want a job, and I was like ding, ding, ding, I want to go to school." Nineteen years after starting college as a traditional-aged freshman, Rose enrolled in coursework at the community college.

Rose is working toward an associate's degree in teaching (AAT) and she hopes to transfer to a private women's college. When I asked about stopping after the AAT, she wistfully replied, "Yeah, I would never be able to fully teach. To operate a class on my own, I have to have a degree." When I asked Rose how the struggle to attend college will be worth it, she told this story,

Even this morning, [son] said something...everyday I have to say, 'I'm sorry.' You could push a button at this point in time and just say, 'I'm sorry. I don't have the money.' So anyways, [son] wanted to go out and play ball tonight. I said it was really muddy. So anyways, he said it would be fun to get one of those golf things – he's four – to get one of those golf things with a hole in the end and you could hit the ball into that. I was like, 'Oh yeah, that would be kind of fun.' And I said, 'Well, it'll be awhile.' He said, 'It's because we don't have the money, right?' And I said, 'But isn't it funny.' I said, 'We want a lot of things, but we're doing without them and it's okay.' And it really is. It's okay. And that's what I keep telling them. It's hard right now for everybody, but I've got to get through school. I've got to get a better job. I won't have to work so hard. We'll have time

together. This kind of thing. All of these welfare programs, I could not be here without them.

Rose uses fifteen federal and state policies to manage college enrollment. While enrolled in college, she has utilized Pell Grant, federal subsidized loans, federal unsubsidized loans, TANF, EITC, food stamps, Medicaid, child care subsidy and Workforce Initiative Act. As well, two of Rose's children attend a private religious elementary school on a full scholarship. When I asked Rose for some policy participation documents, she brought in the 45 action notices she has received from the state since enrolling in welfare programs a little over a year ago. Each action notice represents a change to her enrollment status in one of the programs. While enrolled in my class, Rose received a notice that she was about to be removed from the Medicaid rolls. I asked her about that action notice during the second interview. She said,

At first he [caseworker] was like, 'No, you're good.' And then he was like, 'Wait a minute.' He did realize...we both realized that, oh my gosh, I really was going to be without insurance in two weeks. So the scramble happened. I had to quit my job. I was working at aftercare for my daughter's school for actual pay which as \$10.70 an hour. It was a screaming good deal. So, he had misentered the information that I can only earn \$234 a month for a family of four, whereas it was really \$342 a month. Since I was getting \$339 in child support, that counts. When he finally got that entered correctly, which took a supervisor to get that figured out, then I was back on the program. In the meantime, I lost that outside money which was helping.

Nicole

After graduating from high school, Nicole left home to live with friends and attend the community college about 60 miles from her home town. Nicole related her experience like this:

I graduated in '01 from [high school]. I moved to [community college town] in '01, and started in college. Partied too much. Dropped out. Got pregnant unexpectedly. I was working at [gas station] down toward the

prison. And then, I pretty well got fired from there. If I could have proved that it was because I was pregnant, I would have done it. Then I moved back home, and lived with my parents for awhile until I had him then lived there until he was about two."

When Nicole's grandfather died, Nicole's parents allowed Nicole and her son to live there rent free. She commented, "It's a lot better without Mommy and Daddy there twenty-four seven." However, her parents pay her utilities, her car insurance, the property taxes on the house, and other house related expenses. As well, her parents purchased her car for her. Nicole works 30 to 40 hours a week at a discount retail store near her home. During the week, her son attends preschool and goes to a baby sitter. Nicole's mother and her sister-in-law provide free child care while Nicole is at work during the evenings and weekends. When I asked her what she uses her income for, she replied, "It goes toward the baby sitter and the cell phone and little bills I have, and groceries that I can't get with food stamps and gas."

Nicole has never been married, and the father of Nicole's son does not have any contact with her or her son. The following exchange concerns her thoughts about her son's father.

Interviewer: What about the father?

Nicole: I have nothing to do with him. He lives in [nearby town].

Interviewer: Does he see your son?

Nicole: I have nothing...I haven't talked to him since I was two months pregnant and my son's four. He knows nothing about him.

Interviewer: Do you plan to file for child support?

Nicole: I don't want my son to have to go back and forth. And now that he's four, he don't know who he is. It would scare him. I don't want nothing to do with it. I'm doing fine on my own with my parent's help."

Five years after starting college as a traditional-aged freshman, Nicole returned to college as a full-time student; however, she has struggled to maintain the minimum gpa. Right now, she is on academic probation and has lost her Pell Grant. If her grades

improve, she could get the Pell Grant back next semester. When I asked her about the struggle to attend college, she commented, "It's just trying to find time to actually study. You sit down to study and you've got a kid that's constantly wanting, you know, and won't go to bed unless you go to bed." Throughout my interviews with Nicole, time management was a constant issue.

Nicole plans to become an RN, but currently her gpa is not strong enough for her to be admitted to the nursing program, which is very selective. When I asked her why she chose nursing, she said, "Cause it runs in my family. My aunt is a nurse. My mom was. She worked at a hospital and stuff. It was just something...there's always a job opportunity somewhere. You are always needed. There's always a job out there in that. You're helping people."

Since Nicole refuses to name the father on aid forms, she is ineligible for some types of aid, like TANF. Nicole said, "Yeah, watch who you say that to though because some people think I pay rent...for like WIC and...so I can get food stamps" Nicole indicates that she does pay rent on her food stamps application. As a result, she receives \$124 a month in food stamps that she would not receive otherwise. Nicole is enrolled in seven policy initiatives, including Pell Grant, Federal SEOG, EITC, food stamps, and WIC, as well as Medicaid and Head Start for her son. Nicole was without health insurance between 2003 and 2007. She became eligible for her workplace health insurance plan in January 2008.

Anne

After graduating from high school, Anne left home to live in a dorm and attend a baccalaureate institution about 80 miles from her home town. She described her transition to college.

So, I also live in a town with 600 people. My graduating class had 18 people in it, so we were really like classmates who were more like brothers and sisters. So whenever I went to [college], it was quite a bit of a culture shock for me, because, for one, there were different minorities which I was not used to at all. Secondly, my class sizes were 50 to 60 students in a class instead of 18, which was terrible. So, I quickly found myself going from being the outgoing, outspoken, center of attention to the hidden face in the crowd. It was like I kind of just vanished in all those people.

Anne continued to attend classes, but she started going home every weekend. Eventually, Anne started to date someone from her home town. She said, "So whenever I went back to school, all week long all I wanted to do was go back home. That's all I could think about was going back home." Anne said she began to "go out every night with girls from the dorm." She continued, "We'd go to the bar and we would drink all night." Anne skipped her finals and found herself on academic probation and suspended for the semester. She returned home and "decided to get a job because my mom said I couldn't stay on the couch all the time, so I went to work at [the factory]."

By this time, Anne and the boyfriend from home had broken up, and she was dating a man she worked with at the factory. Anne said, "I got pregnant. I decided the number one thing I did not want to have a baby and not be married. Secondly, I did not want to waddle down the aisle." She and her boyfriend married. She quit her factory job because she found the labor difficult while she was pregnant. Anne stayed home with her son until he was two then she went to work at another factory near her home. Anne has

health problems related to her factory employment. She said, "My doctor tells me that the only thing I can do to fix my shoulders is to find a new line of work or take painkillers for the rest of my life."

Throughout the interviews, Anne talked about being uncomfortable with her current circumstances. Her home kept coming up as a source of frustration for her. She described her home as "an old flower shop." Anne said,

It's a long metal building with a metal roof. The man that owns it turned it into a duplex. It's not a house. My front yard is a gravel parking lot. We both wanted a nice house in the suburbs where our son could go to school and play with kids on the street. I think what happened is he just got comfortable with it. I, on the other hand, am not happy with what we have. I want more for us. I've always wanted more for us. I've never been satisfied, so that kinda makes it a conflict of interest I guess.

Anne and her husband no longer plan their future together. They are not romantically involved; however, they continue to live together and file their taxes together. Anne is in the process of finding another residence, making transfer decisions, and making financial decisions. Anne and her husband have significant financial problems including a \$5,000 federal student loan from her initial college enrollment right after high school. Anne and her husband also have medical debt, credit card debt, and car loan debt. In total, their personal debt is around \$40,000. Two years ago, they were sued by the area hospital for defaulting on their payment plan. Currently, they have consolidated their debts and now make payments to a consolidation company.

Seven years after starting college as a traditional-aged freshman, Anne enrolled full time at the community college. In addition to working at the factory, Anne has had Work-Study jobs at the college including a tutoring position. Since enrolling, Anne has

earned one B and 12 As. Anne's interest in education has created significant conflicts with her family members. She complained,

People in my family don't understand that [college] you see. They are all against me. Why do you think you have to be better than the rest of us? We're all happy. Why can't you just be happy with this? And I just – I'm not. I'm too smart for my job. I'm smarter than my bosses.

Anne's cumulative gpa is a 3.2, and she is planning to transfer to a private college about 90 miles from her home. She plans to leave her son in the custody of his father while she completes school.

Anne is completing an associate's degree in teaching, and she hopes to become a high school English teacher. When asked how she would describe herself as a college student, she said, "I'm very helpful. I find myself helping people a lot. That's why I pretty much know I want to be a teacher."

Anne and her husband together earn between \$42,000 and \$45,000 a year which is well above the federal poverty threshold and ineligible for the Pell Grant; however, Anne's income, hovering around \$15,000, a year is much less than her husband's income. Anne does not utilize the federal loan program. She is enrolled in three policy initiatives: Work-Study, a state scholarship/grant, and EITC.

Charlene

While enrolled in high school, Charlene prepared to attend college by enrolling in the state merit aid program, taking college preparation courses, and taking dual-credit courses; however, she became pregnant with her daughter during her senior year. She said, "I knew there was a problem, but I decided to wait until after cheerleading was over to test myself." Charlene's boyfriend was several years older than Charlene and living with his parents. During her pregnancy, Charlene lived with her parents; however, her

father's medical coverage through his employer ceased medical coverage for Charlene because she became pregnant. Charlene had a difficult pregnancy including early labor that resulted in her daughter being born six weeks premature. Charlene recalled,

I had it [daughter] at [town]. I had a doctor at [town] that I was going to, but I didn't see her very often because she was worthless. Had her [daughter] then I was transported to [another town] by ambulance. I went into labor several times. I went into it [labor] about three times and they stopped it with drugs. That's why they sent me to [hospital]. They thought since it was state funded I would have more of a chance of staying there and getting good care.

This medical care left Charlene in substantial debt. Her portion was \$22,000, and her daughter's charges were over \$50,000. The hospital forgave the debt for her daughter's care and Charlene's hospital stay. That left Charlene with a \$10,000 medical debt that she is trying to pay off in monthly installments. Charlene and her boyfriend decided to cohabitate, but the relationship quickly fell apart.

In commenting on her year away from school and cohabitating with her boyfriend, Charlene said, "I was very forgetful. Like not using my brain really brings me down. It was horrible. I was like totally potato. I would read recipe books, which I never made anything. I would read recipe books, but I'd burn everything I made, but it was good reading."

Currently, Charlene lives with her parents, works full-time, including overtime, at an area nursing home, and attends school full-time. Charlene's home is a 30-minute commute from the community college she attends. Charlene's mother provides child care for her daughter while Charlene is at work and school. Charlene's father suffers from Post Traumatic Stress Disorder and is on disability. Charlene's brother is in prison for multiple drunken driving charges and drug charges.

One year after graduating from high school, Charlene enrolled full-time in the community college. When I asked her about not attending college right after high school, she said, "I took a year off to take care of her [daughter] because she was a preemie and I didn't feel comfortable leaving her home with anyone else besides myself." When I asked her why she decided to attend college, she commented, "Because without a college degree, there's nothing out there besides minimum wage and a little bit higher. I'm not the kind of person that sits around and doesn't work, so I always wanted to be a teacher, which doesn't pay much, but it's a job." When I asked Charlene about her transfer plans, she said, "I'm not sure what will happen. I'll just decide later."

Charlene is working on an associate's degree and planning to major in English education. She said, "I would like to teach in an inner-city school."

While enrolled in college, Charlene has chosen to work rather than rely on federal and state programs. However, she has utilized four policy initiatives: Pell Grant, EITC, WIC, and Medicaid for her daughter. Charlene has been uninsured since having her daughter until recently when she became eligible for her employer's health insurance program.

Carol

After graduating from high school, Carol left home to live with her boyfriend and attend the community college about 30 miles from her home town. However, she withdrew from her courses during her first semester of enrollment. When I asked her why she withdrew, she said, "My daughter's dad didn't like it, so I dropped out. Jealous boy. Worried that I would find somebody else, so he just kinda wanted me to stay home." Shortly afterwards, she and her boyfriend had a daughter together. Carol went to work in

an area nursing home as a Certified Nurses Assistant. When I asked if her daughter's father is still part of his life, she said, "He's in prison. Drugs, selling drugs. He was in there before I met him too for that same thing. This is his second." Carol's childhood was particularly difficult and marked with physical and sexual abuse. In talking about her parents and their spouses, Carol said, "She [her father's wife] was verbally abusive and she got physical with me, so I went to live with my mother. And then her husband was...I call him a pervert. So I went to live with my grandma."

Six years after starting college as a traditional-aged freshman and after her boyfriend went to prison, Carol enrolled part-time in the community college. She maintained part-time enrollment for three years earning 45 community college credit hours. A year ago, when Carol began work at the state mental hospital, she stopped taking courses at the community college. Although she has no plans to return to the community college, she is considering enrolling in a for-profit online college program.

Carol's vocational interests revolve around helping troubled youth. When I asked her about her current position, she said, "My job now...they're adults...but you're still helping peoples, and that means a lot to me to be there to help other people. I don't think I would feel as good about it if I wasn't. That's what I want to do. That's what I wanted to do for a long time." I asked, "Are you doing that now?" Carol replied, "Yeah, I think so. I help a little bit everyday I guess."

Carol is fully employed at a mental hospital for the criminally insane working as a Forensic Rehabilitation Specialist there. Although Carol's daughter is in school, Carol's grandmother provides care for her granddaughter at non-school times when Carol is working and commuting. Carol commutes three hours a day and works 40 or more hours

a week. Although her current employment raises her above the federal poverty level, during college enrollment Carol and her daughter lived below the federal poverty threshold. Carol received funding from four policy initiatives: Pell Grant, EITC, and Medicaid and Head Start for her daughter while enrolled in college. When I asked her about food stamps, she said she does not believe it is "right" to use federal and state income assistance programs. She said, "It's just not something I would want to do as an adult.... I work to support my family and myself and not live off somebody else, because that's what you're doing, and that's not right."

Beatrice

After graduating from high school, Beatrice enrolled in the community college as a full-time student on a full music scholarship. When I asked her why she initially enrolled at the community college, she said,

It was because I got the scholarship, and we really couldn't afford college. I had two brothers. My mom made me do it. Like I got sick the day of the audition. We got a thing at school about it. My music teacher did it. So I called for an audition time. The day of my audition I had strep throat and couldn't sing or nothing, so I wasn't going to do it. I wasn't going to call her and say, 'Hey, can you do another audition just for me?' And my mom kept hounding me and so I did. And I went and did my audition and I got it. So she rubbed it in my face. Your mom is always right. I was really glad I did what my mom told me to do.

As she began college, she also started dating a young man from her home town. During her second semester of college, she said, "After I started dating [boyfriend], I started skipping classes a lot, so my second semester my grades were down." During that second semester, Beatrice became pregnant. She recalled, "Then I went back the third semester because I wanted to keep my scholarship. I had [son] in October of that year. It was October 2005. I took two weeks off from school and went back. It wasn't very long.

Couldn't really afford to take off much longer 'cause finals were coming right up."

Beatrice enrolled for one more semester, but her grades were declining and she lost her music scholarship. She dropped out of college for one year. She took a full-time job, moved three times with her boyfriend, and became pregnant with her second child. After her daughter was born, she enrolled again at the community college.

She recently completed her associate's degree and is pregnant with her third child. At graduation, she was 22 years old, and her gpa was a 2.34. Beatrice has vague plans for transfer. She said, "I plan on eventually going to another college. Or I can do on-line – whatever schools offers on-line classes." Beatrice plans to work as a substitute teacher or in a daycare program.

Beatrice cohabitates with the father of her children; however, she does not disclose this fact on her aid forms because if she did she would lose the Medicaid for her children and \$422 per month in food stamps. When I asked her about how others perceive food stamps, she said, "People using the government. I've heard that a lot. That people just don't work just to get government funding and stuff. That's not my case. I'm trying to support two kids and go to school at the same time. Going on three." Her partner currently works in construction and earns more than \$40,000 a year, although he has not always been fully employed. Although Beatrice's partner has health insurance through his employer, Beatrice is ineligible for the plan because they are not married. She struggles to obtain healthcare for herself for illnesses and injuries that are not pregnancy related. Beatrice was enrolled in nine policy initiatives during college enrollment: Pell Grant, Federal SEOG, Work-Study, a state scholarship/grant, EITC, food stamps, WIC, and Medicaid for her pregnancies and her children. Beatrice does not file for TANF because

she would be required to name the father, and the state would seek to obtain child support payments from him.

Chelcy

After graduating from high school, Chelcy married her first husband. The marriage lasted six months. Chelcy recalled, "I was young, really young. I was just out of high school. I got married and six months later I got smart. A few years later, I married my second husband and we ended up having two kids." Her marriage to her second husband was strained and Chelcy said,

My husband and me would kinda go round and round because I did things that he would call 'ass backward.' He finally said, 'There's something wrong with you.' So I went to [town] to a psychiatrist. I can't remember his name. [Husband] came down a couple of times to talk with the psychiatrist. It was comical, but the psychiatrist would be like, 'She feels like you only love her when she does something right.' And he goes, 'Well, I do when she does something right.' He said, 'No, you don't understand. She feels that way all the time.' He goes, 'She doesn't do things right very often.' He kept putting it off like that and the psychiatrist was like, 'No, you're not getting it.' She thinks you don't love her when she doesn't do something right.' He goes, 'She doesn't do anything right very often.' It was like you wanted to thump him 'cause the psychiatrist couldn't get through his head that he was saying he didn't love me.

I asked Chelcy to give me an example of something she did wrong. She said, "clothes remain in the dryer, or they would be put in a basket and put in the living room and they would remain there. Clothes might be stuck out on the clothes line for three days because I would forget to go out and get them."

Eventually Chelcy was diagnosed with attention deficit disorder (ADD), and she began to take Ritalin. When that didn't ease the conflict in her marriage, she began to travel to a distant city to receive "bio-feedback treatments." She said,

I had seen an ad on TV about it. I called up to the TV station up there and I said, 'Can you give me the name of the doctor down in [distant state] that

does that?' And I called down there and literally got the doctor herself on the phone. I said, 'I want to know more about this.' And she goes, 'Where are you at?' I said, 'I'm in [state].' She said, 'Oh honey, you're in luck. There is a doctor right there in [state] that does that in [city].'

Chelcy felt the bio-feedback treatments helped her, but her husband insisted that she stop the treatments. She recalled,

And so I did get a little bit of self-confidence and self-esteem built up and I think more than anything [husband] noticed that. There was a stop put to it. 'You come home now, or you are divorced tomorrow. So I came home. I quit it. I didn't want divorced. It wasn't worth my marriage.'

Chelcy had been married to her second husband for twelve years when she finally decided to move out and get a restraining order. I asked if he had been abusive, and Chelcy told this story.

I had gone to bed because I always got up at 3 in the morning to be down at [town]. I drove a truck. I had a route, so I had to be there before 5 to get my truck loaded and get out. So I went to bed early usually. For some unknown reason, he come in that night, flipped on the light and I kinda, you know, squinted my eyes because the light was really bright. I had been sleeping and I was trying to see what was going on. He had one of his guns, one of his shot guns, pointed at me. He told me that if he ever caught me 'f'ing around he would blow my brains out. I thought, 'I've always been scared to leave.' He used to tell me things like, 'You know, I could always tie a rock to your ankle and throw you out in the pond and nobody would ever find you.' So I told my best friend Sherry, 'If I ever come up missing, you have them drag our pond 'cause that's where I'm at.'

Within days of moving herself and her children into another house, Chelcy's husband committed suicide. Because she had not filed for divorce, Chelcy and her two children began receiving social security benefits. Chelcy met and began cohabitating with another man. During this period, she became pregnant with her third child. Not long after the baby was born, the baby's father left Chelcy and moved to another town. Chelcy said, "I thought enough of this. I gotta get up on my feet."

Sixteen years after graduating for high school, Chelcy began taking community college courses. A friend encouraged her to take one course, and Chelcy recalled, "I didn't think I was smart enough. I didn't get good grades in high school. I hated high school. I didn't think I was smart enough to go to college. And what she did was she got me started and showed me, yes, you're smart enough to do this." While in school, she began a successful candle and soap making business that supplemented her social security benefits.

Chelcy earned an associate's in applied science degree in Computer Information Systems; however, she has never worked in that field. Chelcy has married for the third time, and she enrolled in the community college again. She is currently working on an associate's of arts degree. She plans to earn a bachelor's degree, but she has not decided on a major. Her cumulative gpa over 77 credit hours is a 3.7.

Chelcy used the Pell Grant and Federal SEOG to finance her AAS degree, and she also received WIC and Medicaid for her children. Although she participated in four policy initiatives, she did not file taxes and did not report her social security income on her FAFSA assuming it was not earned income. Chelcy does not have health insurance, and has an outstanding \$10,000 debt for a hysterectomy.

Helen

After graduating from high school, Helen took a job at a factory where her mother and sister were employed. Seven years later she married and quit her factory job. She said, "When I got expecting my first child, I felt like the factory work was too hard on me, so I had a job opportunity come up to be a bus driver so I took it. I've been a bus driver ever since. I drove a bus for over 21 years." Helen is a 48-year-old mother of two

children. Helen's daughter lives at home, but her oldest son is grown and is living independently. Helen is married; however, for a significant portion of time during her college enrollment, she was separated from her husband. As well, Helen has lived in or right above the poverty threshold for all of her adult life. Helen's husband worked at a factory until his health deteriorated. He is currently a janitor for an office cleaning company, but his employment is erratic because of his health. Helen's husband has a pace-maker and regularly receives health care that they cannot afford. Helen's daughter has asthma and a history of seizures. As well, one of her legs grew faster than the other. This condition required surgery that was paid for by the Shriners. Helen has high blood pressure and is on medication to treat it. Medical debt is a constant problem. In fact, they have been sued by area hospitals for defaulting on payment plans, and Helen estimates her current debt to be \$20,000.

For Helen, returning to school is about a childhood dream of becoming a nurse. Twenty-eight years after graduating from high school, Helen enrolled in the community college. I asked if she could identify when she first thought she would like to become a nurse. She recalled, "I think back when I was real young I thought it would be cool. My mother was a nurse, a nurse's aide. When we were kids, she worked at nursing homes as a nurse's aide." I asked if her mother enjoyed her work as an aide. Helen responded, "She acted like she did. Then went she went to the factory work. I don't really remember why she went to the factory work. But my mother always took care of people and taught me how to take care of people. I just always thought I would like to be a nurse." When I asked Helen about her decision to delay college enrollment, she said,

I just never thought financially I could afford it. I didn't think I got good enough grades and stuff like that from high school. So when my kids were

growing up and they were sick, I didn't feel like I could put out the time to go to college. Once they got big enough then my mother took ill. So then I took care of her. I moved in with her and took care of her for her last few years of life. That just kinda renewed my desire to want to be a nurse.

Over the year and a half in her mother's home, Helen's mother repeatedly encouraged her to go back to school and earn a nursing degree. Helen's mother died in October; Helen enrolled full-time in January. Helen recently quit her bus driving job so that she would be able to attend the clinical courses required for her nursing program.

Helen uses eleven policy initiative, including Pell Grant, federal loans, Workforce Initiative Act, HRSA scholarship and small institutional scholarships to finance college. As well, she and her family receive food stamps and EITC. Helen and her family live in federal housing referred to as "the projects." Helen and her husband do not have health insurance; however, her daughter receives Medicaid.

Marie

Marie dropped out of high school at 16 and married. At 17, she gave birth to her oldest child. At 19, she had her second child. After her first divorce, her grandfather urged her to return to school which she did earning her GED and her CDA (Child Development Associate). While working in a daycare, she remarried and had her third child. Her second husband was constantly physically abusive. Marie recalled, "After about a year of living with that, he decided to hit me so hard in my stomach that he ruptured my uterus." The injury necessitated a hysterectomy when Marie was 26 years old. Eventually, Marie divorced her second husband. She is the 33 year old mother of three children. She has been divorced twice, and she and her children currently live with her boyfriend and his daughter by a previous relationship. He has two other children who visit on weekends. I asked Marie to describe herself and she said, "Five foot five and one

hundred and five pounds and mouthy. Just a mom. That's how I describe myself." In listing her priorities, Marie said, "Being a mom is most important, then college. More than likely, over getting married to [boyfriend] is college, yeap. And that's they way he'd want me to say it. College first."

Marie's middle daughter was sexually abused by a family member, and Marie indicated that the sexual molestation has resulted in long-term health problems for her daughter. Marie's son has asthma, and her youngest daughter has kidney problems. Health related issues and health care expenses are a constant concern for Marie because of their illnesses. In addition, Marie, her partner, and her partner's daughter have no health insurance. Marie's two oldest children are on Medicaid, and Marie's youngest child has health insurance paid for by the child's father. The following exchange captures the tension between Marie's college requirements and the demands of mothering.

Interviewer: How's your attendance?

Marie: Not bad, except for the last week. I've had all my kids sick and two of them have been in the hospital.

Interviewer: When you have sick kids, does college wait?

Marie: College has to. I'm the only parent that they rely on.

Interviewer: Can't you rely on [ex-husband] or [ex-husband]?

Marie: No. And, [ex-husband] had the two kids last week, and he called me and told me I had to take them because they was sick.

Interviewer: So when they get sick, he calls you?

Marie: Yeap. That makes me responsible. And I'm their mother. I'll take care of them.

Interviewer: Do you attend class when your kids are sick?

Marie: I have to stay home.

Eight years after earning her GED, Marie enrolled at the community college.

Although Marie begins each semester at full-time enrollment, she often drops courses as the semester progresses. She has completed 32 credit hours with a 2.25 gpa. She commutes an hour a day to school and back. I asked what being a college graduate means

to her and she replied, "It means a lot to me. I'm the only kid in my family that graduated from high school and is going to college. My mom graduated [high school]. My dad didn't. My sister didn't. My brother didn't."

Marie is working on an associate's degree in teaching. Marie commented, "When I was a little girl, I always wanted to be a teacher, so that when I moved in with [boyfriend], he encouraged me to go back to school. A couple of years later, I decided to go ahead and go."

Marie participates in eight policy initiatives: Pell Grant, Federal SEOG, federal subsidized loans, Work-Study, a state scholarship/grant, an institutional scholarship, EITC, and Medicaid for her children. Marie works 24-32 hours a week at a gas station in her home town. Marie does report her cohabitation on aid forms; therefore, she does not receive food stamps. When I asked her about food stamps, she commented, "Because living with [boyfriend], we make too much money even though they don't take out the point that he pay \$900 a month in child support." I asked specifically if she indicates that she is cohabitating on the food stamps form. She replied, "Yeap. They don't consider child care or any kind of schooling or his child support that he pays out for each one of his kids that don't live with us."

Collective Portrait

Ranging in age from 21 to 48, all of the women in this study are Caucasian. Given that 91% of this community college's students are Caucasian, the race of the participants is appropriate. The average age of the participants is 31.7. Although the average age at the community college is 24.3, the nature of the group being studied makes the higher average age of the participants predictable.

I collected the cases of five mothers who have never been married, one mother who had been divorced once, and two mothers who have been divorced twice. Of these eight cases, two women are cohabitating and planning to marry. Three are in serious relationships that they expect will lead to marriage, and one remarried after graduating with an associate's degree. As well, I collected the case of one woman who was separated through part of her college attendance, but living with her husband during part of her college attendance. Finally, I collected one case of a woman who was married, filing taxes jointly, and living with her husband; however, both she and her husband consider the marriage over and she is in the midst of making decisions about how to end the marriage and maintain enrollment in college. All the women are the biological mother to at least one child.

Most of the participants enrolled in college right after high school. Specifically, seven participants, Kate, Rose, Anne, Charlene, Nicole, Carol and Beatrice, were college-ready upon high school graduation, and six of the women attended college immediately after high school either briefly or to associate's degree completion. Of the college-ready participants, two, Kate and Anne, dropped out of college to marry. Four participants became pregnant, Charlene, Nicole, Carol, and Beatrice; however, their pregnancies impacted their pathways differently: Charlene delayed college enrollment for one year; Nicole withdrew her first semester and returned five years later for full-time enrollment; Carol withdrew her first semester and returned six years later for part-time enrollment; Beatrice continued through degree completion with only one interruption in her full-time fall and spring enrollment pattern. Finally, Kate left college during her first semester to return home and help care for a sick sibling. Of the seven college-ready participants,

three attended a baccalaureate institution upon initial college enrollment, and four attended the community college upon initial college enrollment. By contrast, Chelcy, Helen, and Marie were not college-ready upon high school graduation; rather, they considered college a possibility only after many other life experiences. The following table depicts the current community college academic standing of the participants.

Table 2

Academic Standing of Participants

<u>Name</u>	<u>ACT</u>	<u>GPA</u>	<u>Complete Credits</u>	<u>Developmental Credits</u>	<u>Degree Earned</u>
Kate	n/a	3.2	64	X	yes
Rose	23	3.6	57	X	
Nicole	15	1.7	28	X	
Anne	21	3.2	59		
Charlene	17	3.1	45		
Carol	16	2.6	45	X	
Beatrice	18	2.3	73	X	yes
Chelcy	n/a	3.7	77	X	yes
Helen	21	3.3	42	X	
Marie	n/a	2.3	32	X	

The Associate Degree of Arts (AA) that requires students successfully complete 64 credit hours with 43 hours of required courses and 21 hours of elective courses. The Associate Degree of Applied Science (AAS) requires between 60 and 72 credit hours depending on the area. Three of the women (Kate, Beatrice, and Chelcy) have already completed a degree: Two have completed an associate's of arts degree, and one has completed an applied associate's of science degree. Kate is currently enrolled at a public, liberal arts baccalaureate institution, and Beatrice is not enrolled in college. Chelcy, the AAS degree completer, is enrolled in the community college and seeking an AA degree. Two of the women, Helen and Nicole, are working toward the Associate Degree of Nursing that requires 75 credit hours. However, only Helen has been admitted to the

program. Nicole is working on the general education requirements, and she is struggling to complete those. Carol dropped out of college without completing a degree, but she is considering enrolling in an online program at a for-profit institution. Seven of the women in the study were enrolled at the community college during the study. Nine of the women are in good academic standing at the community college. Nicole is on academic probation and has lost her Pell Grant award. If her grades improve, she will be able to apply for a Pell Grant in the next academic year.

The ten participants in this study are enrolled in 19 different policy initiatives at the federal, state, and institutional level. Ten of the policies are related to education, and nine are non-education policies. Rose, a single mother of three, was enrolled in the greatest number of policies at fifteen, and Anne, a married mother of one, was enrolled in the fewest at three. Although this finding seems expected, it is more surprising that Helen, a married mother of two, was enrolled in eleven policies, while Carol, a single mother of one, was enrolled in only four. The average number of policies enrolled in was eight. Nine of the ten participants were enrolled in three of the policies: EITC, Medicaid for children, and Pell Grant. Seven participants received food stamps, but food stamp awards varied greatly with Rose receiving \$522 a month and Helen receiving \$86 a month.

Equally interesting are the policies that were not used extensively. Only two of the participants received TANF and another two of the participants lived in subsidized housing while enrolled in college. In addition, four participants took out federal student loans, and four participants were employed through Work-Study for at least one semester.

In general, if the women earn more than \$350 a month then they are not eligible to receive Medicaid themselves; however, Work-Study income does not count in the income calculation for Medicaid in this state. Kate and Rose are the only participants who are managing employment and Medicaid enrollment simultaneously.

For all the participants in this study, balancing the right amount of work and aid often put the women in precarious situations, especially regarding health care coverage. For Rose and Kate, opting not to work off campus means they are eligible for Medicaid; however, seven of the women in this study are choosing to work for the added income which makes them ineligible for Medicaid. When Carol quit attending school altogether in order to work full-time, she became eligible for employer health coverage. Charlene and Nicole became eligible for their employers' health insurance in January of this year; however, for most of their college enrollment period they were without health coverage. The other four participants do not have health coverage and have no plans for obtaining it. For Helen, the lack of health care will prove to be a significant barrier to degree attainment in the next school year, because the state nursing board has passed a regulation requiring student nurses to have health insurance while taking clinical courses. Nine of the women receive health coverage for their children through Medicaid. Only one woman in the study, Anne, has had constant health insurance through an employer while attending college.

Issue Question One

This section relates the findings that respond to the first issue question, "What is the nature of the capabilities or functionings that low-income mothers believe they will gain or do gain by attending the community college?" To answer the question, Robeyns'

(2003) list of capabilities was used as a framework for analyzing the interview data. For Sen (1999), the capability to act in society is what is important for economic development; however, Robeyns (2003) argued that when conducting policy research, capabilities are difficult to ascertain; rather researchers should identify functionings or the activities that demonstrate capabilities. Robeyns categorized the capabilities or functionings into three types: Type I functionings or those that are intrinsically desirable to all humans; Type II functionings or those that are achieved, but the level of achievement depends on personal preferences; Type III functionings or those that are most likely to be unequally constrained by gender, race, or class. The types of functionings are used to organize this section.

Type I Functionings

Type I functionings are functionings that are intrinsically desirable to all humans (Robeyns, 2003). They include:

- life and physical health,
- mental well-being,
- bodily integrity and safety,
- shelter and environment,
- and being respected and treated with dignity.

In many respects, the ten women in this study have not fully achieved type I functionings or capabilities. Seven of the women have spent part or all of their college enrollment period without health insurance. As well, seven of the women reported that they or their children suffer from a serious medical condition. Four of the women said they had struggled or were struggling to pay for medical care. Two of the women reported receiving medical attention for a mental illness that resulted from a past abusive relationship. Five of the women described a past relationship with a parent, a parent's

spouse, or their spouse as abusive. The interview questions were not designed to illicit responses relative to shelter and environment, so that functioning is not discussed.

One of the most difficult functionings for this group of women was attaining and keeping health insurance. Charlene said this about her experience with health insurance:

I guess just the whole Medicaid thing really disturbed me when I was seventeen. You know here I am going to school with these girls who are pregnant and they were on Medicaid and why can't I? Because my dad made too much apparently. ... Even though I was pregnant and his insurance had already kicked me off and declared me independent of him. I'd seen all these girls go to high school and they had Medicaid and I couldn't understand why I couldn't get it. I pretty much felt like my life ended. I didn't know what to do.

The following was an exchange with Carol about health insurance.

Interviewer: How did you get health insurance?

Carol: I didn't have any.

Interviewer: How long did you go without?

Carol: I worked there for seven years, so I'd say as long as I've been on my own.

Interviewer: If you needed health care, what did you do?

Carol: Paid for it or I didn't go.

Beatrice is pregnant with her third child, and she spent a sizable portion of her college enrollment pregnant. While pregnant, Medicaid will cover pregnancy related expenses. In this quote, Beatrice was talking about Medicaid coverage while pregnant.

They pay for dental work only while you are pregnant. You can only get the stuff done while you're pregnant, but they [dentists] won't do dental work while you're pregnant, so that doesn't really make any sense. After I have the baby, it's only good for 6 months and it only covers birth control.

Beatrice also told about having a car wreck while uninsured; she was not pregnant at the time of the wreck.

When I had a car wreck this semester 'cause I fell asleep driving, and so I had a car wreck. I didn't go to the hospital 'cause I knew I wasn't insured. So the next day I was...my neck and back was hurting really bad, so I went to the walk-in place at [college town]. I don't know what it's called.

They wouldn't accept me unless I could pay. Half of it was going to be at least \$150. I remember them telling me that. I just didn't have the money, so I couldn't see a doctor. I didn't have any insurance.

The following exchange with Chelcy concerned her health insurance and health-related bills.

Chelcy: No. I don't have insurance still to this day. But I'm healthy.

Interviewer: You haven't had insurance since when?

Chelcy: I haven't had insurance since 1997 right after [youngest daughter] was born. That's when I dropped my insurance because when my husband died, I continued to on with Insurance Company, Cobra. I paid for it up until after [youngest daughter] was born and everything was situated with her, then I couldn't afford it anymore. I had to drop it.

Interviewer: That's ten years.

Chelcy: Yea, hence the doctor bills on my credit report.

Interviewer: How much debt do you have?

Chelcy: I'm guessing there's probably...I had to have a hysterectomy and it was not covered, so there was a good \$10,000 there by the time they were done.

The participants in this study struggled with health insurance and gaining health care for themselves. They were able to provide health care for their children through state programs, but they were unable to achieve this functioning for themselves.

The majority of the women did not report mental health problems. Of the participants, Rose talked most extensively about mental health; however, she combined her mental health issues with her daughter's mental health. She said:

...she was already showing signs of living in a conflicted home...a lot of screaming, slamming, scary. It was really ugly in our home, so I sought treatment for depression and she's been going through counseling and things like that and I have been trying to recuperate from all that.

For Rose, being eligible for Medicaid is particularly important because of the expense of mental health care as the following exchange demonstrates.

Rose: With my therapist at \$225 an hour and \$400 worth of medication a month for me.... I have champagne taste in my medication...depression and anxiety.

Interviewer: How does the state providing health insurance help with college access?

Rose: I would be a basket case. ...

Interviewer: Without health care there would be no school?

Rose: Oh yeah, definitely. ... Trying to imagine affording health insurance on my own is...it's not going to happen.

For Rose, maintaining mental health meant maintaining her enrollment in state-provided Medicaid, and health insurance worked in tandem with college access. Without mental health care, Rose felt she would not be able to manage college.

Five women labeled a past relationship as abusive, so abuse was the greatest challenge relative to the functioning of bodily integrity and safety. Carol and Marie reported the most suffering from abuse. Carol was physically abused by her father's spouse and sexually abused by her mother's spouse. As a young woman, she was abused by her boyfriend. When I asked Carol if she lived with her boyfriend until he went to prison, she said, "We stopped before then because of the lifestyle [drugs and physical abuse]. I didn't want any part, you know, in that, so I thought it was really stupid and I didn't want that around my daughter. I wanted more for her than that."

Marie suffered childhood abuse, as well as abuse in her second marriage. She said:

I would have seizures when I was little because my father was abusive. And I would get headaches. ... The only thing to get rid of them was to go to sleep. I would lay my head down on my desk and go to sleep. ... And the principal would call me to his office, and he would take a board, and after I laid my hands on his desk, he would smack my hands and ask me if I was going to stay awake.

Marie's relationship with her second husband was particularly abusive. She related:

When I got married the second time, everything was good for a year and a half and the day I brought her [youngest daughter] home was the first day

I got my black eyes, cracked wrist, cracked elbow, broken ribs. ... He still beat on me until one day when my son asked how come daddy gives me black eyes and I said pack your bags. ... I guess I didn't want my kids seeing that no more. It's not the way I wanted them to see me. ... Every night for a year he called my phone. Every night at midnight he threatened to kill me.

For Carol and Marie, abuse was a part of their childhood and their early adulthood. The quotes demonstrate that both women were motivated to leave the abusive relationship in their adulthood by their child/ren and the desire to model a better life for their children.

Several of the women related stories of being treated disrespectfully by either campus personnel or by a state worker. For example, Kate related this story:

I really hate that office there. They are very demeaning and demoralizing, I feel. I'm literally in tears every time I come out of that office. That woman has something...it's humiliating. If you could just go to work and not have to ask them for anything, just say forget it [college]. I'm just going to go find something to where we have enough to make it.

For Kate, quitting school and working full time is tempting simply because she would not have to endure the negative treatment she perceives at the Division of Family Services.

Rose related her feelings of being treated with disrespect by a Financial Aid Officer at the community college. On two occasions Rose became unhappy at her Work-Study job at the college, and requested a new position. Because of the expense of gas and her tight time schedule, Rose asked numerous questions about proposed positions and voiced her concerns about expense and travel time. Eventually, the Financial Aid Officer called Rose "picky." Rose decided to apply for a tutoring position at an area elementary school where she could do observations for one of her classes, and she took the initiative to go to the elementary school and meet with the assistant principal. The assistant principal was impressed with her background in childcare and interested in having her

start right away. The elementary school contacted the Financial Aid Officer as a reference for Rose.

The principal and [the financial aid officer] had a conversation. It was determined that because I kept turning down these jobs [Work-Study positions] that I was not stable and should not work with children because children become attached to people.... You look back and this is a burnt bridge. That is such a wallard [slang: ruined] relationship now.

The conflict with the Financial Aid Officer lasted for more than a week, and Rose eventually contacted the Financial Aid Officer's supervisor. My observations in the Financial Aid Office left me with the impression that the Financial Aid Officer is sincerely interested in helping student succeed; however, she and Rose clearly had a personality conflict and Rose felt the conflict related to her unwillingness to take work in an unpleasant environment given her financial need.

In a similar conflict, Anne was asked to go to an administrative office to receive an evaluation of her performance in her Work-Study job as a tutor. The evaluation was negative and said that Anne was not professional. Anne responded:

And I just told them, you have to realize that I come from a factory where I work with 40, 50, 60, 70 year olds. I do not work with 18 year olds on a normal basis. If I say something that is inappropriate, I usually catch myself and realize that's not the environment I'm in. ... And [administrator] was like, 'Well you really need to realize that this is a professional environment and whenever you come into those doors you need to let go of everything else in your life and just worry about business.' And I kinda told him, 'With all due respect, I make \$6.55 an hour, and I don't believe that's a professional wage. If you want me to act like a professional, perhaps you should pay me like a professional.'

I know Anne to be boisterous and animated, and I observed her tutoring on several occasions. She was clearly a popular tutor, but she was also louder than the other tutors and students in the center. Despite feeling she had helped a number of students, and despite enjoying the job greatly, Anne was not asked to return to this Work-Study job the following semester.

All of the women lack or used to lack one or more functioning or capability that is intrinsically desirable to all humans; however, for many of the women, education was or is a mechanism for achieving a type I functioning or capability. In particular, the women spoke of achieving health care through health insurance and of achieving respect.

Several of the women saw education as a way of gaining health care. In these cases, the women had struggled with health or achieving health care either for themselves or their children. Helen expressed this idea in response to a question about the possible outcomes of earning a college degree. She said, "I'll have a better paying job, and I believe it'll be a job that has insurance. I think that will help me drastically."

Many of the women saw education as a way to achieve the functioning of being treated with dignity. There were two aspects of this finding: first, participants spoke of achieving the respect of their coworkers and their family members, other than their children; second, the women spoke extensively of being a role model for their children. Through modeling college participation, the women believed they would achieve respect from their children.

First, participants spoke of achieving education as a reason to be treated with dignity in their workplaces and in their relationships. For example, Anne spoke of quitting her factory employment. She said:

“And then when I’m here [college], I feel different. I feel like I fit in. Like I’m accomplishing something respectable – that people understand. And I’m like I’ve had so much experience doing what I want to do now – teaching. Whenever you go do what you enjoy so much and then you have to walk into those doors at that place that you work that you hate more than anything [factory]. Do you know how hard that is? It’s a horrible feeling. It is. I just can’t do it anymore.”

In another example, Marie spoke of how the struggle of college will be worth it. She said,

"So many people have said, 'You can't do it.' And, I'll actually be able to say I did it."

When asked who had said she cannot complete school, she said, "My ex-husbands. The ones that never wanted me to finish school, and never get my education."

Second, all of the women saw education as a way of achieving the respect of their children. They expressed a desire to model achieving a college education for their children. Chelcy said, “And to show a good example to them too. Now, I think if I’d not gone they would never have thought of it. But now I’ve went to college and I really support that.” Rose expressed a similar sentiment:

But I've noticed that I come home and I'll be excited about a grade that I've got and she's [her middle daughter] trying harder. She's putting a lot more effort. She notices her grades. It's good for her as well. We study together. It's good for all of us.

Marie said, “...it would be setting a good example for the kids. You know I can always hold that over their shoulders. I did graduate. You will graduate.” Anne spoke of modeling achieving a college education for her son, but she also spoke of being role model for other children in her family.

I’m hoping that’s [college] a little tradition that I start because my family certainly isn’t...like I said I’m the only person in my entire family, not just my immediate family, my cousins, my uncles, my aunts and all, that has ever been to college, ever. It’s crazy. So, I’m hoping to start a trend with my family. ... I tell them if anything else, go get an associate’s degree. If you have a better paying job at the factory, you don’t have to work in the

labor division of it. You can work in the front offices with an associate's degree.

In talking about how the cost of college will be worth it, Charlene commented:

My thing with college is I always want to do something to show [daughter] you can do it underneath...certain circumstances, so once I get that BA, it will be like proving to her that even though Mommy messed up, it is still possible to do what you want to do and always wanted to do. I think the cost of like me not getting to spend every morning with [daughter] will pay up and she'll be old enough to look at it and say, 'Well, my Mommy's a teacher now.' She won't think about all the time that she didn't get to spend with me.

For the participants in this study, achieving respect in their workplaces, from their families, and from their children is a clear answer to issue question one.

Type II Functionings

Type II functionings are achieved functionings meaning that the person chooses to participate in the capability, and the degree of her participation is largely driven by individual preferences (Robeyns, 2003). These functionings include education, mobility, leisure, time-autonomy, and religion. This section covers findings related to education, mobility, time-autonomy, and religion.

The findings related to education are threefold: first, the participants in this study were able to function in higher education at the community college; second, transfer was a difficult educational functioning for one woman in the study; third, the participants do not see a clear pathway to baccalaureate attainment.

All of the women in this study have gained access to community college education and are participating in college to some degree. The extent of participation, particularly whether full-time or part-time, is largely determined by the choices the woman makes to balance school, family, and work.

The women clearly named their reasons for attending the community college as related to the relative inexpensive nature of community colleges and the logistics of college attendance like commuting. In response to a question about why they attend or did attend the community college, Rose said, "Tuition, \$95 a credit hour." Chelcy commented, "I didn't want to have to drive a long distance because it would have cost gas money. I knew there was a Pell Grant that would help me pay for my books and the classes." Charlene remarked, "Because I had [state merit aid] here and it was close so I could still make it back to work." Helen named cost and the easy commute as well saying "Because it was handy for me right here in town. ... It's a lot cheaper here than the per se university or [names a college] or some of them bigger colleges." Anne offered:

I think there were probably about three reasons. Definitely cost efficiency was the number one reason. Where else can you go for a whole semester and pay 12 to 1,300 dollars, and cut it into four payments. And, like I said when I was at [public baccalaureate], I felt lost in the crowd and this was something smaller. So that way I was not in such an overwhelming environment. ... And then pretty much distance. I didn't want to have to move out of [home town] because both of our jobs were there."

The women in this study, through a combination of the community college's open access mission, the community college's relative inexpensive tuition, and the community college's location were able to make postsecondary education an achievable functioning.

Second, for the only participant who has transferred to a baccalaureate institution, transfer has proved a difficult functioning. Kate transferred to a very selective, public, liberal arts college in her home town; however, she is struggling at the baccalaureate institution. The following quote illustrates this struggle.

I feel like that [community college] does an excellent job for the non-traditional student and understanding that we have a life outside of school and [liberal arts institution] – not so much. I think probably the biggest thing that makes me cringe is group projects. I love working with people, but I always get a group of young teeny-bopper girls that live right on campus and I know I can be in class from this time to this time and I can't promise my time outside of that time. I feel like I let the group down, but I'm not willing to take more away from family to make that happen. And, it [liberal arts institution] was just bigger. I liked the smaller setting [at the community college]. I felt like I got more there.

Kate's gpa has dropped, and she indicated that she feels less committed to her academic life than she did at the community college. Kate said that she did not have the personal relationship with the faculty at the baccalaureate institution that she had at the community college, and she asked me how she could obtain academic advising at the institution.

Third, access to the bachelor's degree does not appear to be an achievable functioning for most of these women. For seven of the women, transfer is a desired educational functioning that they have not yet achieved, and they have no clear path for achieving it. Of the seven women who indicated that they intend to transfer, but are not sure where or how, two have more than 70 credit hours, two have more than fifty credit hours, two have more than forty credit hours, and one has more than thirty credit hours. For all seven, despite having a significant number of college classes completed, transfer is still a question mark in their academic future. They were unsure about how to achieve the logistics of transfer, like commuting, child care, and work.

For example, Beatrice, a participant who has already earned her AA degree, said during her first interview, "I plan on eventually going to another college. I was going to do [private baccalaureate college], but it has to be something closer, unless we move. Or I can do on-line -- whatever schools offer on-line classes." When Beatrice arrived for the

first interview, she was visibly pregnant with her third child. The following is an exchange about how the pregnancy impacted her decision-making.

Interviewer: When is your baby due?

Beatrice: June 18th

Interviewer: Would you have done something [school] differently if you hadn't become pregnant?

Beatrice: Probably, yeah. I probably would have went and enrolled in [private baccalaureate institution]. Even if they were night classes, like twice a week, or whatever, I would have drove there. I really want to get my school done.

Interviewer: Do you still plan to get the BA?

Beatrice: Yeah, eventually.

Interviewer: Do you feel that you are in a hurry?

Beatrice: No. I'm young. I'm 22. There's people that go to school that they're 30 or 35, so I know there's still a chance that I can get it eventually. [Oldest child] will start school in three years; he'll be 5. It will be easier. [Daughter] will probably be in preschool. It will be easier to go to classes maybe when he starts to go to school.

Interviewer: So is school going on the back burner for awhile?

Beatrice: Yeah. Get these babies out of diapers.

Because Beatrice is pregnant with her third child, she will be changing diapers for at least three more years. The private baccalaureate institution that Beatrice mentioned in the quote is 60 miles from her home, and her partner is commuting 35 miles in the opposite direction.

Charlene plans to graduate with her associate's degree in May 2008; however, she has not made transfer plans. The following is an exchange with Charlene during the first interview during her last semester at the community college.

Interviewer: Where are you thinking about transferring?

Charlene: I'm not sure yet. I don't know what will happen.

Interviewer: What options are you thinking about?

Charlene: Probably [urban area 150 miles from home].

Interviewer: Do you have a college in mind?

Charlene: No, not really. I haven't decided.

Of the ten participants, Charlene is the only participant who talked about moving more than 150 miles from her home town. The next exchange with Charlene is during the second interview where I asked her about the outcomes of the AA, BA, and employment. Charlene's uncertainty about her transfer plans is illustrated by the exchange.

Interviewer: What are the possible outcomes of an AA?

Charlene: Transferring to the university [no name] and finishing the degree for education.

Interviewer: Will the AA degree improve your opportunities on the job market?

Charlene: Substitute? I know the substitutes in [home town] get paid a hundred dollars a day. And any grade lower, it's like fifty dollars a day. I'm like that's not worth it.

Interviewer: What are the possible outcomes of a BA?

Charlene: If you have a bachelor's degree, you should be able to get a good paying job. It will improve my income, job, chances of getting a job, things like that.

As the conversation continued about possible places to earn a bachelor's degree, eventually Charlene said, "I need to retake my ACT." We continued to talk about moving a sizable distance from her home town for her bachelor's degree, so I asked specifically about her child custody agreement. She said:

I don't think I ... I haven't thought about that 'cause I would have to go back to the court and issue a parenting plan and [child's father] would have to agree to it or the judge would, so it's all about.... I was thinking California at one time, but I can't go out there anymore, because of Jocelyn and the custody agreement. You can't go out of state with her, so...and I learned yesterday that if I don't present a parenting plan and if I did go out of state and move before I presented a parenting plan -- I did it backwards -- there would be a chance of me getting her taken away from me and put with her father full-time. So, even if I stay in the state I have to issue a parenting plan like six months in advance to where they have time...I have time to serve them and take it to court.

During the third interview, Charlene indicated that she planned to take a break from college after completing her associate's degree. She said:

Like I might take a year right after I graduate from here just to bring up my ACT score and get into a better college, but I think it will all be worth it in the end. Working a job that's killing your back like myself [factory work], I think it will be worth it.

Recently, Charlene came by my office to tell me she and her boyfriend had decided on another area of the state. I asked if she had begun constructing a parenting plan, and she indicated that she had not.

In addition, the participants of this study understood that the Pell Grant would not cover the cost of tuition and fees at the area's baccalaureate institutions, but they did not have a clear plan for paying for a baccalaureate institution. In this exchange, Rose discussed the cost of the baccalaureate institution after a question about where she wanted to transfer. Like Charlene, Rose will graduate in May 2008.

Yeah, I'd love to go to [private women's college]. That's \$21,000 a year. It's unbelievable. So, there's a lot of grants. So that's what I need to do. Build it and they will come. That's my next thing right now. Try to find out. I need to go visit with the advisors at the three different schools. I heard [a fourth school that was a private baccalaureate institution] is offering a bachelor's in education. ... I'll see who can offer the biggest scholarships, and that's where I'll wind up at.

The women generally understood that they would need more than the Pell grant to pay for college, but they had not made specific plans for transfer despite being near graduation. In short, the participants in this study were able to access a community college education to accomplish the functioning of education; however, their access to the baccalaureate sector is much less clear.

The women in this study struggled to achieve the functioning of mobility because of child custody agreements. Specifically, five of the participants have child custody agreements that require they present a new parenting plan to the court before they move

out of their county of residence. The following exchange with Marie indicated the importance of child custody arrangements in the lives of the participants.

Interviewer: What life changes are you willing to make to attain a BA degree?

Marie: None.

Interviewer: Will you move to [college town]?

Marie: No. I can't move out of [county] or I lose all my kids.

Interviewer: All three?

Marie: Two of them. It's court ordered that I have to live in [county] or give them to their father. I won't do that.

For several of the women, staying close to family was particularly important, and they indicated an unwillingness to move. For example, Kate said, "I'm where I want to be right now in [hometown] where all my family is located and I don't plan on moving." However, this choice illustrates that Kate is able to function in terms of the capability of mobility. It is a choice constrained only by personal preference. By contrast, the child custody agreements take the capability away from the parents and place it in the hands of the court system. This practice has important educational implications for the women in this study, many of whom live 60 to 90 miles from a baccalaureate institution.

Time-autonomy proved to be another significant challenge for the women. Balancing school, family, and work often meant that the women were unable to engage in leisure activities or they experienced conflicts with others because of the need to be available for child care at certain times or on particular days. For example, this quote illustrates Nicole's struggle with balancing school, work, family, and a long commute.

I drive back and forth three times a week. He's [her son] got a babysitter. And now that he's in Head Start, he goes to school. I drop him off at 7:45. I drive up here, go to school, and the babysitter picks him up at 2:15 and keeps him till I get back. If I have to work right after school then the babysitter will keep him until my sister-in-law can get him.

Throughout all three interviews with Rose, managing time was a theme. In the following quote, Rose talks about her conflict with the Financial Aid Officer and how her time commitments contributed to the conflict.

That was a really fun place to work. I would love to go back, but the travel time cuts into how many hours I can work. I'm here on campus I'd like to work on campus kind of thing, so I don't have to burn travel time. So I told [the financial aid officer]...I stopped by and saw her. She said, 'Well, you're so picky about where you want to work.' You know, I didn't think I was being picky. I'm trying to maximize my money, but I've got to work on this time stuff.

Rose's lack of functioning in time-autonomy created the conflict with the Financial Aid office, a conflict that continued to escalate as the interviews proceeded. By the final interview, Rose had sought out an appointment with the supervisor of the financial aid officer to plead her case and describe her time constraints.

Finally, half of the participants in this study viewed their religious commitments as connected to their educational goals. The women believed God to be acting specifically in their lives to help them accomplish their goals. Kate related her functioning in this area by saying:

I know that I went through things, and not that God made me go through things, because I chose the things that I did. But I know that He's going to be able to take those and allow in me something that maybe somebody else needs to see to get through the time and place.

Helen expressed the connection between religion and school by saying:

I know there are times when He's protected me, and He's opened all these right doors I didn't think was possible. Being able to go to college and being able to afford it. There's just doors opened everywhere to help me go forward.

Rose: "I could not have made it through what I've been going through if I didn't have my faith and the belief that I am not working on a sole job here. I've got back up."

Type III Functionings

Type III functionings are those most likely to be unequally constrained by race, gender and class (Robeyns, 2003). In this study, gender and class are conflated, so it is impossible to distinguish between a capability or functioning that is constrained by gender versus class. Nonetheless, there are several important findings related to Type III capabilities. All of the women believed education to be a route to a more enjoyable labor, to labor that generates greater income, and to labor that offers health insurance, but this finding appeared to be a reflection of the messages society sends regarding the value of education as much as it was a real expectation. For example, Helen prefaced her comments with "They say..." over and over. More importantly, the participants in this study seemed to view education differently than the typical college student. Typically students see education as a short-run expense to be endured for long-run gain; however, for the participants in this study *participating* in education proved to be a route to added income, paid employment, the credit market, and enjoyable social relations.

As with most colleges, the basic aid formula for Financial Aid offices is to take the estimated cost of attendance and subtract the expected family contribution (EFC) and the scholarships and other resources to arrive at the need for aid. This amount is typically extended to the student in the form of federal loans. The following table illustrates the education-related finances for the participants in their first year of college enrollment. AGI is the adjusted gross income for the participant in the previous year. Chelcy did not

report her AGI on her FAFSA, so her EFC may have been higher had she reported this income. Beatrice filed as a dependent in her first year of enrollment; however, in her second year, she lost her music scholarship, filed as an independent, and began receiving the full Pell Grant. All the women except Anne received added income over and above their tuition and fees. Most of the women did not take their allowed loan amount. In fact, only two of the women took out education loans at all.

Table 3

College Financing for Participants

<u>Name</u>	<u>AGI</u>	<u>EFC</u>	<u>Tuition</u> <u>/Fees</u>	<u>Pell</u>	<u>Student</u> <u>Pay</u>	<u>Other</u> <u>Non-Loan</u>	<u>Loan</u> <u>Aid</u>	<u>Cash</u>
Kate	\$4,358	\$0	\$3,327	\$3,949	\$0	\$708	\$5,864	\$7,195
Rose	\$25,573	\$9	\$2,355	\$2,431	\$0	\$450	\$4,162	\$4,688
Nicole	\$10,815	\$0	\$2,566	\$2,025	\$1,230	\$150	\$0	\$839
Anne	\$42,958	\$4,081	\$2,802	\$0	\$2,502	\$300	\$0	\$0
Charlene	\$1,649	\$0	\$3,275	\$4,050	\$0	\$300	\$0	\$1,075
Carol	\$16,679	\$47	\$1,370	\$1,500	\$560	\$0	\$0	\$690
Betrice	\$2,990	\$0	\$2,227	none	\$124	\$2,122	\$0	\$19
Chelcy	\$22,680	\$0	\$2,749	\$3,916	\$100	\$200	\$0	\$1,468
Helen	\$18,548	\$0	\$1,286	\$2,025	\$50	\$100	\$0	\$889
Marie	\$12,927	\$0	\$3,176	\$4,050	\$100	\$800	\$0	\$1,774

This study demonstrated that for the participants education was a mechanism for added income and access to the credit market. However, the added income is not significant, and most of the women did not take advantage of their access to the credit market. All of the women were employed during college enrollment. Currently, only Helen is unemployed, and she only recently quit her job because of the conflict between her bus driving position and her nursing courses. Only Rose used Work-Study as a significant source of income. The other nine women sought employment off campus reasoning that off-campus employment would generate more income.

Because Rose is enrolled in the greatest number of policies, she provides an ideal way to view Type III functionings from various stakeholder's perspectives. Rose's adjusted gross income (AGI) in 2006 was negative \$1,451. This number is the basis for her FAFSA calculations for the 2007-2008 school year, so her estimated family contribution (EFC) is zero, meaning Rose is eligible for the maximum amount of student aid. The following table depicts Rose's financial aid status during the calendar year of 2007, during which Rose was enrolled as a full-time student during the spring, summer, and fall. With consistency in mind, I used calendar year numbers for the following tables; rather than school-year numbers, so they could be easily considered with non-education policies.

Table 4

The Case of Rose: College Financing

Tuition and Fees	\$ 4,125
Loans	\$ 5,934
Aid	\$ 5,971
Work-Study	\$ 2,923
Total Financial Aid	\$14,828
Cash Refund	\$ 7,780
Total Cash Income from School	\$10,703

From a policy-maker perspective, it seems Rose benefits from college enrollment. Not only is she receiving more than enough aid to pay for tuition and fees, she is receiving enough aid to have nearly \$11,000 in income to pay for living expenses.

As well as income from school-related policies, Rose is enrolled in numerous non-education related policies. The following table depicts her benefits from these policies. TANF and child support are grouped together because the state was willing to pay TANF in the amount of her expected child support award until she settled in court

and began receiving the child support money. At that point, Rose was no longer eligible for TANF funding.

Table 5

The Case of Rose: Non-Education Finances

Food Stamps	\$ 6,264
TANF and Child Support	\$ 4,098
Child Care Subsidy	\$ 3,750
Total Non-Education Related Aid	\$14,112
Total Cash Income from Non-Ed. Aid	\$ 4,098

Rose's non-education related aid amounts to \$14,112, and this aid added to her education aid amounts to \$28,940. Further, this amount does not include the cost of Medicaid for her and her three children, and it does not include the tuition deferral for the private elementary school that two of her children attend or the free and reduced lunch benefit the children receive at school. From a policy-maker perspective, it appears the system has adequately cared for Rose while she attends school.

However, from Rose's perspective the financial struggle to attend college is almost insurmountable. Rose has two major outlays each month: mortgage and car payment. Her mortgage payments amount to \$10,392 a year. Rose does not intend to sell her house because there are several repairs that need to be made, and in this poor real estate market, she is afraid she cannot cover her mortgage loan by selling. As well, Rose pays \$3,960 a year in car payments. The total of these two outlays for 2007 was \$14,352, and the total cash income available to her in 2007 was \$14,801, leaving Rose \$449 for gas, utilities, clothing, and other expenses for the entire year. Rose received the maximum EITC for the 2006 tax year of more than \$4,000 that helped pay living expenses.

From a policy-actor perspective, Rose is getting the maximum amount of allowable aid from both the welfare system and from the education system, and all of her essential needs are covered: food, healthcare, education, and housing. In fact, when Rose was explaining to her children that she could not afford to buy them Christmas presents, she said, "In November, I had been warning them that we probably wouldn't have a Christmas with gifts. We were going to do decorations, and we were going to bake because I had food money. We can do anything with food. We can feed everybody, but we can't do gifts...." Despite all this aid, Rose is not making enough cash income to pay for all of her necessary expenses.

In conclusion, education-related funding allowed the participants to participate in college, generate added income, and access the credit market; however, few of the women took advantage of the added access to employment and credit.

Issue Question Two

This section reviews the findings related to issue question two, "How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education?" I used Dequech's (2006) institutional influences of restrictive, cognitive, and motivational to consider whether the 19 policies captured in the study were barriers to or avenues of access, persistence, completion, and transfer in higher education. A number of the policies were not a barrier or an avenue because the funding from the policy was small enough not to motivate decision-making by the participant. For example, the Federal Supplemental Educational Opportunity Grant (SEOG) is reserved for the neediest college students. After the Pell Grant has been awarded, the institution's financial aid

officer determines who are the neediest students and those students receive additional funding ranging from \$100 to \$150. The participants in this study were not aware of the additional funding prior to college enrollment. Often, they were not aware that they had received the funding at all, and because of that, it did not impact their college-going decisions; therefore, the findings in this section concern the policy initiatives that did impact their decision-making. As well, in general when participants were asked how others perceive federal non-education policies like subsidized housing or TANF, they often answered, "I don't know."

Avenues

The study illustrated five institutional influences which created avenues of access, persistence, completion and transfer in higher education. First, the Pell Grant was a strong motivational influence for single mothers attempting college at the community college institutional type. In fact, the Pell Grant proved to be the mechanism the women used to achieve the functioning of higher education. For the community college in this study, the maximum Pell Grant award is more than enough to pay for all tuition and fees. As well, it is often enough to pay for books too. All of the women who received Pell Grant indicated that attending the community college would either be impossible or extremely difficult without the Pell Grant. Rose said, "If I didn't have Pell, I wouldn't be in school." Likewise, Kate indicated, "Absolutely it [Pell] has helped me. It would just not even be possible." Several of the women named the expenses that Pell covers. For example, Marie said, "I wouldn't be coming if there were no Pell, because I couldn't pay for my classes and my books and driving to school." Nine of the participants used the

Pell Grant to access the community college, and all nine spoke favorably of the Pell Grant.

Two, Work-Study employment proved to be a motivational influence for Rose and Anne. Anne and Rose viewed Work-Study as a place to practice their professional interests, and Rose used Work-Study for work income that would not be counted against her in calculating benefits.

Three, the Federal Workforce Initiative Act (WIA) funds proved to be a positive cognitive influence for three of the participants. The funds were distributed for education-related expenses through a local private agency. The WIA funds paid for out-of-pocket expenses like printer cartridges and nursing uniforms. Helen said, "It pays for things that had to come out of pocket money like my nursing uniforms, shots that we had to get, shoes. We had to get stethoscopes. All that kind of stuff." However, the program did not dependably pay for expenses. Helen commented:

They told us [nursing students] they [WIA administrators] would pay for it. They actually did not pay for it. They ran out of money they said. They was supposed to pay for it, but when it came time to request our money, they didn't have the money to pay for it, so that came out of our pocket. But they paid for like our lab fees. It don't affect me, but [WIA] also pays for ones that travel.... It'll pay like gas and stuff.

Fourth, food stamps were a motivational influence because the women were able to concentrate on school, rather than worrying or struggling to pay for food. Seven of the women received food stamps during college enrollment. Betrice commented, "I don't have to worry about working to feed my kids. Formula, that's a big cost. So I can worry about my education." Likewise, Kate said:

That is just something else that...it would be very difficult to be going to school and concentrating, keeping the focus until I'm done with school. Knowing that even if some other things, if you're failing in some other

areas, you have food there to feed your kids. It's a huge stress not to have to think about.

Finally, certificates like the Certified Nursing Assistant (CNA) or the Child Development Associate (CDA), as well as credentials like state accreditation of a home day care were precursors to college attendance; therefore, they seemed to be a motivational influence. For four of the women, a certificate or accreditation provide a motivational influence to seek a college degree. Rose said this:

I don't stop easily. I don't come to barriers well. There's something beyond that barrier. To be a home childcare provider, I was a home childcare provider. Well then, I got state licensed. Well then, I got nationally accredited. Well then, I went back to school because I wanted a degree in early childhood education.

Charlene and Carol obtained a CNA certificates to work in an area nursing homes before enrolling in college. Charlene expressed pride in her CNA certificate and the desire to keep it current even after earning her bachelor's degree. She said,

And you can retain that as long as you work in a long care facility for at least eight hours in two years, so if I was a teacher I could go to a long-term care facility and work for eight hours and keep that certification as long as I do it every two years. I'll probably keep it just as like a fallback job if something happens.

Barriers

This study also suggested three institutional influences which created barriers to access, persistence, completion and transfer in higher education. First, because the Pell Grant is not sufficient to pay for the tuition and fees at a baccalaureate institution, the Pell Grant proved to be a restrictive influence on baccalaureate attainment. The Pell Grant was or is the avenue for financing the associate's degree at the community college for nine of the participants. Four of the participants have an academic record that would make them competitive for scholarships at some of the area baccalaureate institutions;

however, the women did not see scholarships as a dependable avenue of access. They were well aware that the Pell would not cover the cost of the area baccalaureate institutions.

Second, child custody agreements proved to be a restrictive influence on baccalaureate attainment at baccalaureate institutions. Five of the participants have child custody agreements that require re-negotiation should the mother decide to move out of the county of residence.

Third, the prospect of loans proved to be a restrictive institutional influence on educational attainment through the community college and the baccalaureate institution. Although several women indicated a general unwillingness to take out loans, others were conflicted about loans. For example, when asked, "If the only way would have been loans, do you think you would have gone?" Carol replied, "It would have been less likely because it would be just another bill to have to pay. I didn't really need that." Charlene said, "Pell Grants definitely made me want to go to college a little more because I don't have that worry about loans like everybody else." However later in the interview when asked about financing her bachelor's degree, she said, "Then I'll have to get loans -- which I owe money already so what's a little more." The two women in this study who have taken out loans for their associate's degree both indicated discomfort related to the loans.

In sum, the women in this study seemed uncertain about baccalaureate attainment. Their uncertainty was primarily related to financing college, logistics, like commuting, and to child custody agreements.

Summary

Using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances. There were ten cases under study, and nineteen policies captured by the study. Seven of the ten participants were college-ready upon high school completion, and six of the participants attended college immediately after high school. Three of the participants delayed college enrollment after high school more than ten years. Three of the women in the study have already earned a degree: two women have earned associate's degrees, and one woman has earned an associate's of science degree.

In answer to the first issue question, "What is the nature of the capabilities or functionings that low-income mothers believe they will gain or do gain by attending the community college?", I organized findings according to Robeyns (2003) types of human functionings. I found that the women lack functioning in Type I capabilities or capabilities that are intrinsically desirable to all humans. Specifically, the women suffered from poor health, poor mental health, and abuse. In addition, at times the women felt they were not respected or treated with dignity by their families, coworkers, and college personnel. However, the women felt that education was a route to achieving intrinsically desirable functionings, including having health care through health

insurance, being treated with dignity by families and coworkers, and gaining respect from their children through role modeling.

The findings for Type II capabilities indicated both functionings and non-functionings. The women in this study were able to access community college education and most appeared likely to earn or have already earned an associate's degree; however, the barriers to baccalaureate attainment through a baccalaureate institution were significant. The women were not sure how to pay for the baccalaureate institution or how to manage the logistics of attendance, like commuting. For half of the women in this study, their access to the baccalaureate degree was hampered by child custody arrangements requiring the women to stay in their county of residence at the time of the custody hearing or file a parenting plan with the court. In addition, the women found time-autonomy to be a difficult functioning. While enrolled in college, the women were trying to balance child care and employment. However, half of the women were active in their religious life, naming God as the reason for the ability to attend college or naming Christian motives for attending college.

Type III findings demonstrated that the women in this study found greater access to income, employment, and the credit market through participation in higher education funding programs. As well, most of the women in the study participated in non-education programs that resulted in non-cash income, like food stamps. However, few of the participants applied for federal student aid loans and few of the participants participated in federal Work-Study.

In answer to issue question two, "How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues

of access, persistence, completion, and transfer in higher education?", I organized policy findings according to Dequech's (2006) three institutional influences: restrictive, cognitive, and motivational. There were five policy avenues to access, persistence, and completion found in this study, and all of them were either cognitive or motivational influences. There were three policy barriers to access, persistence, transfer, and completion found in this study, and all of them were restrictive.

The first avenue was that Pell Grant proved to be an access point to associate's degree completion at the community college. The second avenue was that Work-Study employment was a motivational influence in terms of practicing professional work for two participants. Third, WIA was a positive cognitive influence for three of the participants because it paid for unexpected out-of-pocket expenses like printer cartridges and nursing uniforms. Fourth, food stamps were a motivational influence for seven of the women, and finally, certificate attainment was a motivational influence for four participants in that certificate attainment was a precursor to community college enrollment.

There were three policy barriers to access, persistence, completion and transfer. First, the Pell Grant is not adequate to pay for baccalaureate attainment, so the participants were uncertain as to how they would finance the enrollment at the baccalaureate institution. Second, child custody agreements limited the mobility of participants making it difficult for the women to move to attain a baccalaureate degree at a baccalaureate institution. Third, the participants were generally unwilling to take out loans to finance degree attainment at both institution types, the community college and the baccalaureate institution.

Chapter 5

DISCUSSION OF FINDINGS

Introduction

The Spellings Commission report subtitle was “Charting the Future of U.S. Higher Education,” and the report writers viewed the future in economic terms. Policy suggestions in the report were motivated by economic concerns and reasoning. The authors argued that higher education is the economic stimulus that will ensure the economic health of America; however, research has shown that higher education does not result in economic growth uniformly (e.g., Goetz & Rupasingha, 2003). Rather, economic growth through education is most likely to occur when funding is targeted at groups least likely to earn a college degree. One such group is low-income single mothers. Therefore, using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

This chapter discusses the findings presented in Chapter 4 and possible research, practice and policy implications of the study. The chapter is divided into the following sections: overview of study, discussion of findings, implications for research, implications for policy, implications for practice, and conclusion.

Overview of Study

Policy makers view higher education as a stimulus for economic growth; and in the United States, investments in higher education generally result in economic growth (e.g., Mamuneas, Savvides, & Stengos, 2006). Unfortunately, the growth has not been widely shared by all Americans (e.g., Weller, 2006). Specifically, poverty is concentrated in rural areas, and income inequality in rural areas has a strong negative impact on economic growth (Fallah & Partridge, 2007); however, research has shown that investments in rural community colleges result in economic growth (Aghion, Coustan, Hoxby, & Vandenbussche, 2006).

One group of Americans that struggle with poverty is single mothers (CPS, 2007), but when single mothers earn a college degree they are able to sustain an income above the federal poverty threshold (e.g., Pandey, Zhan, & Youngmi, 2006). Economic policies intended to reduce poverty among single mothers needs to be based upon the microeconomic decision-making of the mothers (Gottheil, 2002); therefore, using theories of economic development as the lens for analysis, I sought to study how single mothers used certain government and institutional policies to facilitate their attendance at a rural community college in a Midwestern state, and how these policies shaped the women's choices about college attendance. More specifically, I wanted to understand how the single mothers' college-going decisions related to access, persistence, completion, and transfer were affected by the federal, state, and local policies they used to manage their economic circumstances.

The single mothers in this study were either recently graduated from or currently enrolled in a rural community college; therefore, they had yet to experience added

income from college attainment. In addition, economic growth captures increased income, but it does not capture the many ways a person's standard of living may be improved by higher education. For these reasons, the focus of this study is not on economic growth; rather, I used two economic development frameworks that derived from the thinking of institutional economists (e.g., North, 1990; Sen, 1999). First, the interviews and documents collected were analyzed using Robeyn's (2003) list of human functionings to understand the expectations and the impact of college enrollment on the functionings of single mothers. Second, the interviews and documents collected were analyzed using Dequech's (2006) three institutional influences on microeconomic decisions to understand which education and non-education policies are barriers to college participation and which policies are avenues to college participation. The findings from the study are discussed in the next section.

Discussion of Findings

The findings in Chapter 4 were grouped under the issue question they answered. Issue question one, "What is the nature of the capabilities or functionings that low-income mothers believe they will gain or do gain by attending the community college?" was answered using Robeyn's (2003) list of functionings. Issue question two, "How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education?" was answered using Dequech's (2006) institutional influences. The discussion section follows that same organizational pattern.

Overall, this study is premised on the micro economic exchange model. Human demand for a product (e.g., higher education) varies greatly by human preferences, or

demand sensitivities, relative to the cost of the product. The price of a Pepsi becomes much greater for the person who finds they have developed diabetes. The price not only includes the \$1.50 for the Pepsi, but also the possible risk to her/his health. An economic development framework is needed to capture the risk to one's health. In addition, economists have found demand sensitivity to be quite similar across groups (Gottheil, 2002). For example, urban and suburban Americans will pay more for a cup of coffee than will rural Americans. Understanding the preferences or demand sensitivities relative to higher education for single mothers means that policy makers may be able to lower the cost of higher education for single mothers by targeting their demand sensitivities with policy initiatives that reduce the cost of higher education for single mothers. This discussion of Robeyns' functionings and Dequech's institutional influences for the women in this study will revolve around how those functionings and influences that might illustrate important personal preferences, or demand sensitivities, for policy makers interested in seeing more low-income single mothers access, persist, transfer, and complete higher education. Specifically, functionings may indicate price barriers or demand sensitivities relative to education that are specific to single mothers enrolled in higher education. Policy makers could tie a particular functioning to enrollment in higher education thus reducing the cost of higher education for single mothers.

Robeyns' Functionings as Demand Sensitivities

Robeyns categorizes functionings into three types. Type I are those functionings that are intrinsically desirable to all humans. Type II are those functionings that are achieved based on personal preferences. Type III are those functionings that are most likely to be unequally constrained by gender, race, or class.

This study demonstrated that poverty among single-mothers results in a lack of Type I functionings. In particular, functionings related to the health care system were especially troublesome for the women. The women in this study struggled to gain health care and maintain enrollment in a health insurance plan. As well, two of the women were being treated for mental illnesses, and five of the women suffered abuse during some portion of their life, thus suggesting a need for counseling or mental health care. The women in the study told powerful stories of being unable to secure health care for themselves. Similarly, the lack of functioning related to health care has been captured in the literature through other conceptual lenses. For example, Johnson, Schwartz, and Bower (2000) used sources of stress while enrolled in college, rather than societal functionings. They noted that health concerns and a lack of health insurance were significant sources of stress for adult women in college. Despite struggling with the health care system, the women in this study as in other studies believe higher education is a route to secure health care (e.g., Johnson, Schwartz, & Bower, 2000). The desire to attain reliable health care is so strong that it is a possible microeconomic motivation for policy makers to consider as they develop policies to attract low-income women into higher education.

The women in this study also reported a lack of Type I functionings related to respect. Several women related stories of being treated disrespectfully by families, coworkers, or college personnel, and several women thought they were being treated disrespectfully because they are low-income single mothers. The struggle of low-income mothers in higher education to attain respect was captured by Attewell and Lavin (2007), Bullock and Limbert (2003), and Duquaine-Watson (2007). These studies noted that low-

income mothers do not believe that higher education is open to them, and they point to conflicts with faculty, staff, and administration as evidence that they are not welcome in higher education. Similarly in this study, Anne's conflict in her tutoring job left her wondering if someone *like her* is somehow inappropriate for a professional setting. The desire to attain the respect of family members, coworkers, and college personnel may prove an important preference that institutions could address if they are interested in seeing single mothers persist in higher education.

As in previous research (Attewell & Lavin, 2007; Haleman, 2004; Jennings, 2004; Luttrell, 1997), this research found that low-income mothers are motivated by the desire to role model for their children. All ten women spoke of participation in education as an important example for their child/ren. However, only one of the 19 policies used this motivation to encourage the participation of single mothers in higher education, and it was only part of a larger set of criteria. The program is an institutional scholarship with a nominal award of \$300 a year. The eligibility criteria for application are nontraditional students defined as students seeking employment in a field often occupied by the opposite gender; single parents; homemakers displaced through divorce, separation, or death; women seeking vocational skills; and, the disabled. The scholarship is awarded by a committee and all of the current recipients are single mothers. The scholarship defines single parents as "individuals who are unmarried or legally separated from their spouse and are pregnant or have a minor child/ren for which the parent has sole or joint custody." Only two of the women in this study received the scholarship, because only students seeking a vocational degree may apply. The microeconomic model suggests that the

motivation to role model may be a real opportunity for policy development that will encourage participation, persistence, and degree attainment amongst single mothers.

For the women in this study, the greatest Type II functionings occur through education and religion. The women interviewed were able to access the community college and participate in religion to the extent they preferred. Because the focus of this study is on public education, the desire to participate in religion would not be an appropriate or ethical lever for policy making, but the access to the community college is discussed below.

In addition, the women in this study struggled to attain Type II functionings in education, mobility, and time-autonomy. Specifically, the women in this study were very uncertain about how to access the baccalaureate sector given their time restrictions and their child custody agreements. As well, the one participant who had transferred to a baccalaureate institution was finding baccalaureate participation to be difficult. The quantitative studies reviewed in Chapter 2 found similar trends. Dougherty and Kienzl (2006) found that parents are least likely to transfer from the community college to the baccalaureate institution. However, Dougherty and Kienzl focused their explanation on the limitations of the community college institution. By contrast, I found that child custody agreements, the commute to the baccalaureate institution, and the cost of the baccalaureate institution were the women's central concerns regarding transfer, not the academic preparation they received at the community college. Likewise, Attewell and Lavin (2007), Berkner, He, Mason, Wheelless (2007) and Stratton, O'Toole and Wetzel (2007) found that parents are less likely to persist in higher education. Similar to Berkner and Horn (2003) and Wassmer, Moore, and Shulock (2004), this study implied that the

reasons for non-persistence may have as much to do with functionings outside the higher education sector, as they do with those inside the higher education sector. This is a potentially powerful finding for policy-makers interested in the persistence of single mothers in higher education.

In addition, the unwillingness of the women in this study to move outside the immediate area may have some other important economic implications for states. In Chapter 2, I reviewed literature noting the *brain drain* effect on investments in higher education. Specifically, states' investment in higher education sometimes do not yield economic growth because graduates leave the state for better employment or greater opportunity (Aghion, et al., 2006; Goetz & Rupasingha, 2003). By contrast, this study showed that single mothers are unlikely to leave the state suggesting that investments in the education of single mothers are more likely to result in economic growth for the state. The risk of the *brain drain* effect or migration at graduation is minimal.

Further, the brain drain effect has proven especially strong in graduate education (Aghion, et al., 2006). In this study, there were two aspiring nurses, five aspiring teachers, two aspiring social workers and one undecided. The women in this study are working on degrees in helping professions that might very well lead them to graduate degrees, but having earned them, their child custody agreements and personal preferences are likely to keep them in the state. Their success is likely to result in greater economic growth for the state, especially given their unwillingness to relocate. This study suggests that states have good reason to be motivated to enact policies and practices that promote college completion among single mothers, because the states are most likely to reap the benefits.

Finally, Aghion et al., found that added investments in the baccalaureate sector negatively impacts economic growth in states far from the technology frontier; however, investments in community colleges positively impacts economic growth in states far from the technology frontier. This may be partly explained by the unwillingness to move on the part of community college students.

By enrolling in the community college the women in this study were able to gain greater access to income, employment, and credit; however, they did not fully take advantage of this access. Specifically, most of the women did not work on campus, and most of the women did not take out federal student loans. In addition, the participants in this study seemed reluctant to take out loans to finance a baccalaureate education. Likewise, Dowd and Coury (2006) found that community college students who took out loans to pay for college were less likely to persist. Some of the women in this study already have significant debt, while others simply preferred not to take on debt. However, the general trend in student aid is one of increasing numbers of federal student loans, as well as increasing numbers and amounts of private loans (Baum & Steele, 2008). It is important to note that low-income mothers are resisting the trend of assuming debt to pay for college enrollment.

Government-funded reporting has indicated that financial barriers to college are negatively impacting baccalaureate attainment and has found that the cost of the baccalaureate sector is negatively impacting transfer rates (Advisory Committee on Student Financial Assistance, 2006). Likewise, the women in this study were unsure how they would finance the baccalaureate degree, and viewed the cost as a substantial barrier to attendance. Coupling the resistance to loans with the financial barriers, policy-makers

and researchers often suggest greater grant aid (e.g., Advisory Committee on Student Financial Assistance, 2006; Berkner, Wei, & Griffith, 2006), but there are some important economic considerations. Some research has suggested that grant aid, especially merit aid, might discourage college attendance by disadvantaged groups (Hendel, Shapiro, & Willen, 2005). Specifically, adding further government grant aid, especially aid with minimum gpa requirements, to the student loan market increases the premium on merit for attending higher education. Those who finance student loans will do so at a greater credit risk, they will charge higher interest rates. The higher interest rates will increase the cost of college and the risk individuals assume when they choose to borrow to pay for college. Students with the least academic merit will assume the greatest financial risk. Paying back the loans will offset increases in earnings and further exasperate income disparity, thus decreasing the likelihood that higher education will be a route out of poverty for low-income single mothers. In sum, big government grant programs are a risky strategy for policy-makers interested in widely-shared economic growth. Disadvantaged groups like single mothers are resistant to taking out large loans, and large grant programs, especially those large enough to offset the cost of the baccalaureate sector, might negatively impact single mothers over the long run.

Another important finding in the Type II category is that the women in this study did not work on campus. Rather, they found outside employment at low-paying jobs in gas stations, nursing homes, bus barns, and retail stores. This finding is in tandem with the findings on the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) (e.g., Shaw, 2004). Research on the impact of PRWORA demonstrates that the work-first philosophy of the welfare reform act has successfully drawn women into

low-paying sectors of the workforce (Kahn & Polakow, 2002; London, 2006; Shaw, 2004). The problem, of course, is that these jobs are less likely to offer benefits and flexible schedules for mothers in higher education, while being more likely to be dead-end jobs. In this study, the women who participated in Work-Study employment viewed it as a site of practice for professional employment. It was not viewed as dead-end employment.

Dequech's Influences as Demand Sensitivities

I found five policy avenues of access, persistence, completion and transfer. They are Pell Grant, Work-Study, WIA, food stamps, and certificate attainment.

In this study, as well as other research the Federal Pell Grant program proved to be a strong motivator to attend community college (e.g., Hardy, Katsinas, & Bush, 2007). The nine participants who received a Pell Grant indicated that college would not have been possible without the Pell Grant. In this multiple-case study, the Pell Grant was sufficient to cover the tuition and fees for full-time enrollment, and some of the women received enough of a refund to cover books as well. The Pell Grant is a strong institutional influence for policy makers to consider.

In addition, the one participant who steadily worked on campus through the Work-Study program was able to maintain Medicaid enrollment because, for Medicaid, Work-Study income does not count as earned income. Given the finding that the women struggled to attain healthcare, this institutional influence is a potentially important avenue of access.

If a single mother's child support is greater than the overall income guidelines for Medicaid, then she would be unable to receive Medicaid even if her only work income

was from the Work-Study program. But, for the majority of the participants in this study, their child support is not great enough to make them ineligible for Medicaid; therefore, having a Work-Study job would enable them to receive Medicaid coverage while enrolled in school. In addition, Work-Study income does not count as income for food stamps, so the food stamp allotment for some of the participants would increase as well. The institution in this study pays minimum wage for Work-Study employment. The participants who worked off-campus earned more than minimum wage, and they often named the low wage for Work-Study employment as a reason for not taking a Work-Study position. However, it is likely that the increased food stamp allotment, as well as the Medicaid benefit would more than offset the difference in pay. The potential to provide women with health care and employment while enrolled in college exists, yet, for the most part, the women in this study did not combine programs to achieve health insurance coverage while attending college.

The Workforce Initiative Act (WIA) provides funding for school for those meeting income guidelines. Private companies bid for the business of administering the distribution of funds, and, in this state, those private offices are located at the unemployment office. WIA funding will pay for tuition, fees, books, and supplies; however, the women in this study found that the WIA caseworkers claimed the program would pay for more than it actually paid for because the money ran out. None of the women in this study received money for tuition or fees from the WIA program. Nonetheless, the women who participated in the WIA program felt the help paying out-of-pocket expenses was a great relief. Often the expenses WIA paid were not anticipated expenses. For example, Helen said she did not expect to have to pay for state tests

required for her nursing program. She was concerned about how she would pay that cost, but WIA paid the cost of the test for her. Covering unexpected out-of-pocket expenses proved an important institutional influence. Programs that cover out-of-pocket expenses that students are unlikely to anticipate might be a policy lever for increasing persistence.

Seven of the women in this study received food stamps while attending college. These women reported that receiving food stamps was a stress reliever for them because they did not have to worry about paying for food; rather they could concentrate on their studies. However, maintaining enrollment in food stamps was onerous. Every two to three months the women were required to keep an appointment with a caseworker and to reapply for food stamps. Kate told a story of a caseworker giving her an appointment time that conflicted with her class schedule. Kate explained the conflict to the caseworker who replied that she had a choice to make: food or school. The need to be enrolled in the food stamps program to manage attendance was a clear avenue for access in this study, but policy-makers might consider how this avenue could be strengthened to improve persistence and retention.

Finally, four of the participants earned a certificate or an accreditation prior to college enrollment; therefore, certificate or accreditation was an avenue for access. The Certified Nursing Assistant (CNA) and the Child Development Associate (CDA), as well as becoming a state accredited daycare provider were viewed by the women as personal evidence that they could manage college. It was particularly reaffirming regarding their ability to manage the academic work of college.

I found three policy barriers to baccalaureate attainment: Pell Grant, child custody agreements, and loans. First, the Pell Grant is insufficient to cover the costs of a

baccalaureate degree. However, increasing the amount of the Pell Grant across the board could have a negative economic impact on the credit market that would be particularly negative for women like those in this study (Hendel, Shapiro, & Willen, 2005). So, while the Pell Grant did prove a barrier to baccalaureate attendance because it is not sufficient to cover tuition and fees, simply raising the Pell Grant amount is unlikely to prove advantageous for low-income single mothers.

Child custody agreements required the women in this study to submit a parenting plan before moving from their county of residence. As well, the participants in this study saw that as risking losing custody of their children, so they were reluctant to file the plan. As a result, child custody agreements were a barrier to baccalaureate attainment. The negative influence of child custody agreements on transfer from the community college to the baccalaureate institution may be of particular interest to policy makers.

Finally, the women in this study were reluctant to take out loans. Other research has demonstrated the same negative effect of loans on community college attendance (Dowd & Coury, 2006). Policy-makers and practitioners cannot overlook the negative influence loans have on retention, persistence, and transfer of community college students.

Implications for Research

This study points to five important questions for future research. First, how can Robeyns' (2003) economic development framework be used to illustrate the educational experiences of other disadvantaged groups? For the women in this study, non-education related policies, like child custody agreements and food stamps, were important influences on their college-going decisions. Research that captures the whole life of

disadvantaged groups could help policy-makers and practitioners understand how they can improve the access, retention, completion, and transfer of disadvantaged college students.

Second, how can the research on brain drain be disaggregated to take into account single-mothers? Are single-mothers less likely to leave a state after degree attainment than are other groups? Quantitative researchers in higher education might disaggregate the brain drain effect even further by considering whether baccalaureate earners who begin at the community college are less likely to leave the state than others or by considering whether baccalaureate earners in helping professions are less likely to leave the state than others.

Third, does the brain drain effect apply to the community college baccalaureate degree? It would be interesting to know whether the brain drain effect applies to community college baccalaureate degree earners in Texas or Florida where the community college baccalaureate is common. The question arises from this study because the single-mothers are pursuing professions for which community college baccalaureate degrees have been offered in other states. As well, a community college baccalaureate degree offered at the institution under study might well reduce the impact of the barriers to college attainment that the participants experienced.

Fourth, how are community colleges using Work-Study funds? Specifically, are those funds being used for single-mothers in higher education? In addition, how are those funds impacting retention at community college? What practices and procedures do institutions use to disburse Work-Study funds? How are those practices and procedures benefiting or harming disadvantaged populations? Because community college students

are more likely to be financially responsible for themselves and their dependants than students in the baccalaureate sector (Katsinas, Alexander, & Opp, 2003), they are likely to benefit from Work-Study practices that mirror the private market. More research is needed to understand this possibility.

Fifth, are federal, state, and institutional funds being used for scholarships, programs, and grants that do not impact individual decision-making? For the participants in this study, there were several policy initiatives that did not influence decision-making. For example, the Federal SEOG did not influence decision-making. In fact, some participants were unaware they had received the money. This question is particularly important in the context of the micro-economic exchange model. If policy-makers intend for programs and policies to impact individual decision-making then they must lower the costs associated with the choice policy-makers want individuals to make. In this case, attending college is the ideal choice. If the federal government is spending significant resources on programs that do not impact decision-making, then the micro-economic exchange model suggest that this is poor use of funds.

Implications for Policy

This study points to four important questions for policy-makers. First, can smaller grant and scholarship programs be combined to influence individual decision-making? Again, the micro-economic exchange model is premised on the assumption that the costs associated with a decision influence the choices individuals make. If policies and programs aimed at reducing the cost of college for disadvantaged populations are not influencing decision-making, then the funds might be better applied in combination or added to a policy or program that is having an influence on decision making.

Second, how can policy-makers better mix existent policies to ensure that single-mothers enrolled in higher education have affordable access to health care coverage? The need for health care for the single-mother was a strong finding in this study. How can policy-makers offer packages of policies intended to encourage participation in higher education by single-mothers? Specifically, how can policy-makers make better use of Medicaid, Work-Study, and food stamps to provide for the needs of single-mothers in higher education? One possibility is to provide federal funding to cross-train some caseworkers in higher education and non-education policies, and then to place the caseworkers on college campus, possibly in financial aid offices. These offices could provide enrollment and maintenance for non-education policies, and help single-mothers understand the interrelationship between policies.

Third, how can policy-makers simplify the policy enrollment and maintenance processes for single-mothers attending higher education? Again, one answer may be to train some caseworkers in policies and programs across the welfare, unemployment and higher education policies then to locate these caseworkers at colleges in financial aid offices. For the women in this study, the average number of policies participated in was eight. One woman participated in fifteen policies. Managing complex policies while enrolled in college is a time burden, as well as a stressor for the women in this study.

Fourth, how can state and federal policies encourage the community college sector and the baccalaureate sector to cooperate utilizing the physical facilities and the human resources at the community college to provide baccalaureate attainment to rural single-mothers? One answer is might be 2 + 2 programs that locate an entire bachelor's degree on the community college campus. Another answer might be the community

college baccalaureate degrees in applied areas like teaching (Floyd, Skolnik, & Walker, 2005; Floyd & St. Arnauld, 2007). Not only would a community college baccalaureate degree be more logistically feasible for the women in this study, it would also be more affordable given the buying power of the Pell Grant.

Implications for Institutional Practice

This study points to four important questions for campus practitioners. First, can institutions develop practices for financial aid counselors and academic advising counselors that are specific to facilitating college attendance of single mothers? Institutional practices that simplify the processes of attendance for single mothers might increase their retention and degree completion. These counselors could make women aware of the relationship between Work-Study and Medicaid, so that the women are able to make for informed work choices. In addition, these counselors could help women understand that a poor credit history does not impact their ability to borrow through the Federal Stafford Loan program, while emphasizing the importance of completing programs and repaying loans.

Second, could institutions focus recruiting efforts on populations who attain certificates like the CNA and the CDA? In this study, the women who earned certificates viewed the certificate as evidence of academic abilities; therefore, it was a avenue for access to higher education.

Third, how can institutions work with low-income single mothers to understand and reduce the severity of the conflicts they experience in their workplaces, at school, and at government offices? While part of a college's mission is to socialize students into professional fields, this mission must be undertaken in such a way that it does not devalue

or discourage vulnerable students. As well, college employees should be able to have behavioral expectations for students. These expectations should be communicated in ways that develop students. Faculty and staff developments that are aimed at understanding the perspectives and stressors of single-mothers might help in this process.

Fourth, how can policy makers devise policies and practices to encourage participation in higher education by single mothers using their strong motivation to role model for their children? Such policies might include learning communities for single mothers that allow children in the classroom, opportunities for single mothers to have their children on campus, and opportunities for single-mothers to meet and socialize with other single mothers.

Fifth, could institutions pay a competitive wage for Work-Study positions? This would likely mean that colleges would have to supplement federal Work-Study funding. However, the long-term financial impact might be positive given that paying a competitive wage will likely positively impact student retention.

Conclusion

The two most common institutions mentioned by the participants as possible transfer institutions were a public university that estimates tuition and fees at \$8,170 a year and a private liberal arts institution the estimates tuition and fees at \$13,034 a year. The public university is twice the cost of the community college and the private liberal arts institution is three times the cost of the community college. Along with the increased cost of attendance, the participants were uncertain about managing their commutes, their child care responsibilities, and their employment while working on a baccalaureate degree. In addition, several of the women struggled to maintain the minimum gpa

required for the community college, thus transfer to any baccalaureate institution with admissions requirements may be difficult to manage. For the one participant who had transferred, making friends and integrating into the culture at her transfer institution was proving a difficult challenge and she had dropped to part-time enrollment because of it. The barriers to degree attainment by single mothers are substantial. From a micro economic perspective, the costs associated with degree attainment are high, so when single mothers choose not to transfer or to persist, that choice may be the most rational choice or the most cost effective choice given their constraints.

Even if the women do attain degrees, the ten women who participated in this study are unlikely to see miraculous changes in their living standards upon degree completion. Earning the degree will improve the likelihood they earn a wage above the poverty threshold, but the unwillingness to relocate and financial challenges, like healthcare and accumulated debt, will continue to be a financial hardship. As well, seven of the women have chosen teaching or social work as their occupational fields, and the pay in these fields is relatively low.

The challenge for policy makers and practitioners is to write and enact policies that reduce the costs or demand sensitivities to higher education for these women. There is a strong economic motivation for addressing these seemingly insurmountable challenges. Increasing opportunity to the poorest sector of the population will stimulate economic development across the entire population and reduce income inequality. In sum, if the institution of higher education is to provide the economic stimulus necessary to see widely-shared and sustainable economic growth, then higher education policy-

makers and practitioners must use policy to impact the demand sensitivities of disadvantaged populations like low-income single mothers.

Appendix A

Interview One: Focused Life History (Seidman, 2006)

The purpose of this interview is to gather a focused life history that highlights the institutions of family, work, and education (North, 1990; Sen, 1999).

1. We have not visited since you were a student in my class at MACC. Tell me about your life circumstances (make sure prompts cover institutions of family, work, and education).
2. How did you come to choose the community college?
3. What are your educational goals?
4. When do you expect to accomplish your educational goals?
5. How are you financing college (prompt with Pell, A+, and student loans)?
6. What state, or federal policy initiatives have you participated in that you qualify for because of your income? (prompt with policies)
7. Do you have any other comments you would like to add?

Interview Two: Details of the Case (Seidman, 2006)

The purpose of this interview is to gain details that will make it possible to analyze the case according to Dequech's (2006) three institutional influences: restrictive, cognitive, and motivational.

1. Regarding each policy the participant utilized: (see responses to Q6 in Interview One)
 - A. In what ways did the policy help you attend college?
 - B. In what ways did the policy hinder college attendance?
 - C. How do you think others who don't use the policy perceive it?
2. Regarding policies not used (esp. TANF, EITC, Pell Grant, food stamps, Medicaid).
 - A. Why didn't you enroll in _____ policy initiative?
 - B. How do you think others who don't use the policy perceive it?
3. What are/were the possible outcomes from earning an associate's degree for you?
e.g., In what ways will an associate's degree help you in the job market?
4. What are some possible outcomes from earning a bachelor's degree for you?
e.g., In what ways will a bachelor's degree help you in the job market?

5. What life changes would you be willing to make to complete your bachelor's degree?
6. What life changes would you be willing to make to obtain better employment?
7. Do you have any other comments you would like to add?

Interview Three: What Does "It" Mean? (Seidman, 2006)

The purpose of this interview is to gain fuller understanding of the influence of institutions on the individual (Dequech, 2006).

1. How would you describe yourself? What values are important to you?
2. What were you like as a college student?
3. What does being a college graduate mean to you?
4. How would you describe the typical community college student?
5. How would you describe the typical baccalaureate college student?
6. How will the cost of college be "worth it"? And, how will the cost of college not be "worth it"?
7. Do you have any other comments you would like to add?

Appendix B

University of Missouri-Columbia
Informed Consent Letter

Date

I, _____, agree to participate in the research study "Institutional Influences Affecting the College-Going Decisions of Low-Income Mothers Attending a Rural Midwestern Community College." The researcher, Kristin Wilson, will interview me about my adult life experiences, including my enrollment in the community college. As well, she will ask for documentation concerning life experiences especially experiences with policies. This documentation may include transcripts, income documents, and financial aid documents.

The interviews will be digitally recorded and transcribed. Kristin Wilson will ask me to review transcripts of interviews for accuracy, but I do not have to review them. I understand that the time commitment for the study is estimated at six hours, and includes three interviews.

The interviews could provide information that Kristin Wilson might want to include in a presentation or publication. Please know that if she makes a written or oral presentation of what she has learned, no names will ever be associated with any individual comments.

The anticipated benefit for society is a deepened understanding of the impact of state, and national policies on college attendance. The potential risk to me is possible psychological discomfort in answering some questions. Possible counseling services in the Moberly area include Preferred Family (660-263-1113) and Lighthouse Counseling (660-269-9577).

Kristin Wilson can be reached at 114 Main on the Moberly Area Community College campus, Moberly, MO, 65270, at 660.263.4110 x346 or 573.682.7776, or at kbwtgb@mizzou.edu. If you wish to contact the university's Institutional Review Board (IRB) about the study, you can do so by calling 573.882.9585 or writing the Board at the University at 483 McReynolds, Columbia, MO, 65211.

I understand that my participation is entirely voluntary and that I may withdraw my permission to participate in this study without explanation at any point.

Signature

Date

Appendix C
Participant Questionnaire

Name: _____

Demographic Traits

Marital Status(circle):

Married (living together)

Married (living separately)

Single (living with partner)

Single Never Married (living alone)

Single Previously Married (living alone)

Partnered (living together)

Number of Children: _____

Children's Ages: (1)_____ (2)_____ (3)_____ (4)_____ (5)_____

High School Diploma (circle): Yes No

GED (circle): Yes No

Parents' Highest Educational Attainment:

Father (circle): HS AA BA MA PhD

Mother (circle): HS AA BA MA PhD

Current Living Arrangements (e.g., with children, partner, roommate, parents): _____

List major sources of income: _____

Policy Participation

Use a checkmark (✓) to indicate any government policy initiative in which you are *currently* enrolled:

Pell Grant _____

Federal Subsidized Loan _____

TANF _____

EITC _____

Food Stamps _____

Subsidized Housing (NECAC) _____

WIC _____

Medicaid _____

MC+ _____

Head Start _____

A+ _____

Other (please list): _____

Use a checkmark (✓) to indicate any government policy initiative in which you were *previously* enrolled:

Pell Grant _____
Federal Subsidized Loan _____
TANF _____
EITC _____
Food Stamps _____
Subsidized Housing (NECAC) _____
WIC _____
Medicaid _____
MC+ _____
Head Start _____
A+ _____
Other (please list): _____

Educational Status and Plans

Community College Enrollment Status (circle):

no longer enrolled currently enrolled transferred earned AA

Baccalaureate Institution Enrollment Status (circle):

no longer enrolled currently enrolled transferred earned BA

Number of completed credit hours at community college
(with a grade of A, B, C, or D): _____

Do you plan to complete... (circle all that apply): AA BA MA

Major in 1st degree: _____

Transfer Institution (e.g., Columbia College): _____

Occupational goal: _____

Employment Status

Are you currently employed (circle): Yes No If so, in what position? _____

Place of Employment: _____

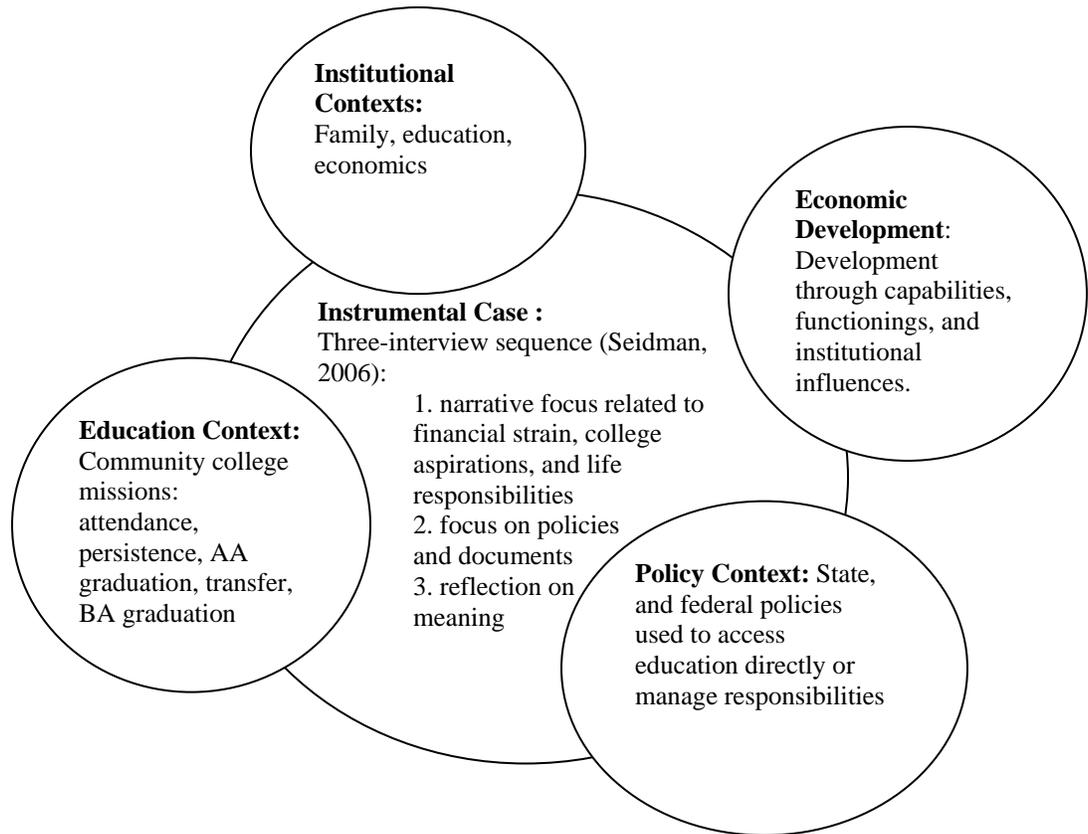
Number of hours per week: _____

Benefits (circle): Yes No Describe: _____

Yearly Salary (circle): -\$12,000 +\$12,000-\$17,000 +17,000-\$24,000 +\$24,000

Hourly Wage (circle): Minimum wage +\$6.50-\$11.00 +11.00-15.00 +\$15.00

Appendix D



Issues Questions:

1. What is the nature of the capabilities that low-income mothers believe they will gain or do gain by attending the community college (Robeyns, 2003; Sen, 1999)?
2. How do federal and state policies directed at low-income mothers give rise to institutional influences that create barriers to or avenues of access, persistence, completion, and transfer in higher education (Dequech, 2006)?

Main Information Questions:

1. What was your life like before attending college?
2. How did you come to attend the community college?
3. What policies have helped or hindered your college attendance?
4. What does college attendance mean to you?
5. How do you expect life to be different after college?

Contexts under study. From *Multiple Case Study Analysis* by Robert Stake, 2006, New York: The Guilford Press. Copyright 2006 by The Guilford Press. Adapted with permission.

Appendix E
Trustworthiness Chart

Criteria	Concerns	Methods
Credibility	<ul style="list-style-type: none"> • whether the data and findings are credible • whether in external party would view the analysis process as credible • whether the initial theories are supported by the raw data • whether the cases or raw data supports preliminary findings • whether the participants believe the data to be accurate 	<ul style="list-style-type: none"> • prolonged engagement • persistent observation • triangulation • peer debriefing • negative case analysis • referential adequacy • member checking
Transferability	<ul style="list-style-type: none"> • whether inappropriate vast generalizations are possible 	<ul style="list-style-type: none"> • thick descriptions so the reader can determine the appropriateness of transferability
Dependability	<ul style="list-style-type: none"> • whether the data collected is accurate 	<ul style="list-style-type: none"> • overlap methods (credibility = dependability) • audit trail
Confirmability	<ul style="list-style-type: none"> • whether the data can be substantiated 	<ul style="list-style-type: none"> • audit trail

Appendix F Policies

Access Missouri is a state grant program tied to the Pell Grant. Missouri students receiving the Pell Grant are also eligible for this state grant. Awards for community college students range between \$1,000 and \$300.

Earned Income Tax Credit (EITC) is a tax credit program designed to encourage participation in the workforce by low-wage earners. For those who qualify for an EITC, the credit may exceed the amount paid in for federal income taxes during the year. In addition, those who pre-qualify can receive the tax refund in regular allotments throughout the year disbursed by their employer.

Federal Child Care Assistance Program provides assistance with child care costs determined by a sliding scale based on income. The program is administered through the Division of Family Services.

The **Federal Supplemental Educational Opportunity Grant (SEOG)** is a postsecondary education grant designed to aid the most disadvantaged students. Institutions distribute the grant at their own discretion.

The **Federal Work-Study Program** provides funding to institutions to create part-time employment on campus for students. Generally institutions reserve the positions for those students with financial need.

The **Food Stamps** program helps low-income families buy food. The program is funded and administered through the U.S. Department of Agriculture.

Gamm is a private, not-for-profit organization in the state where this study was conducted. Gamm disburses federal funding for WIA, as well as other federal and state programs.

Head Start is a national preschool program that enrolls low-income children and teaches school readiness skills. The program is funded and administered through the U.S. Department of Health and Human Services.

The **Housing Choice Voucher Program** or Section 8 Housing is a federal housing program funded and administered through the U.S. Department of Housing and Urban Development. The program provides housing assistance for low-income individuals and families through a voucher system. Families and individuals may choose to live in a low-income housing complex or they may choose to rent a unit that has qualified for this program. The voucher amount is determined by a sliding scale based on income.

The **HRSA Scholarship** is a federal scholarship provided by the Health Resources and Services Administration and funded by the U.S. Department of Health and Human Services. The scholarship is reserved for those in a health-related field.

MC+ is a Missouri health insurance program for low-income families. The program covers the cost of health services for children and pregnant women. Premiums for the program are determined by a sliding scale based on income. The program is partially funded through federal Medicaid dollars, and it is administered through the Division of Family Services. Student loans, student grants, and Work-Study income are not included as income in the income calculation for MC+.

Medicaid is a federal health insurance program for low-income individuals and families. It is funded by the U.S. Department of Health and Human Services, and it is administered through the states. Student loans, student grants, and Work-Study income are not included as income in the income calculation for Medicaid.

The **New Traditions Scholarship** is an institution specific scholarship funded through the Department of Elementary and Secondary Education. The funding is provided to displaced workers or students seeking a degree in an area that is non-traditional for their gender.

The **Pell Grant** is a federal postsecondary education grant intended for students with "financial need." Financial need is determined by the **Free Application for Federal Student Aid** (FAFSA) worksheet completed by all students seeking in type of federal college aid.

The **Special Supplemental Nutrition Program for Women, Infants and Children** (WIC) is funded and administered through the U.S. Department of Agriculture. The program provides certain food products (e.g., formula, cheese, cereal) and nutritional education to low-income families.

The **Stafford Loan** program funds postsecondary education through subsidized and unsubsidized lending. Students who qualify for the subsidized portion have the interest that accrues during college enrollment paid by the federal government. Unsubsidized loans require students to pay the interest that accrues while they attend college. Qualification is determined using the FAFSA form.

T.E.A.C.H. Early Childhood Scholarship is a scholarship program for students seeking a postsecondary education in early childhood education. The acronym stands for Teacher Education And Compensation Helps.

Temporary Assistance to Needy Families (TANF) is a federally-funded direct cash subsidy to poor families. In the state where this study was conducted, TANF funding is only provided to single-mothers willing to name the biological father of their children, and willing to support the state's efforts to garner child support from the fathers.

The **Workforce Investment Act** (WIA) is a federally-funded program offering job training for displaced workers. In some instances, college enrollment counts as job training and students receive college funding through WIA.

Appendix G
Boundaries Chart

<u>Name</u>	<u>Current AGE</u>	<u>Marital Status</u>	<u>Pell</u>	<u>EITC</u>	<u>Poverty</u>
Kate	30	never married	yes	yes	yes
Rose	38	1 divorce	yes	yes	yes
Nicole	26	never married	yes	yes	yes
Anne	28	married/separated	no	both	no
Charlene	21	never married	yes	yes	yes
Carol	29	never married	yes	yes	both
Betrice	22	never married	yes	yes	yes
Chelcy	42	2 divorces	yes	no	yes
Helen	48	married/separated	yes	yes	no
Marie	33	2 divorces/cohab	yes	yes	yes

Appendix H
Policy Participation

<u>Name</u>	<u>Pell Grant</u>	<u>Federal SEOG</u>	<u>Fed. Loan</u>	<u>Work Study</u>	<u>Access Missouri</u>	<u>New Traditions</u>
	1	1	1	1	1	1
Kate	1	0	1	0	0	0
Rose	1	1	1	1	1	1
Nicole	1	1	0	0	0	0
Anne	0	0	0	1	1	0
Charlene	1	0	0	0	0	0
Carol	1	0	0	0	0	0
Betrice	1	1	0	1	1	0
Chelcy	1	1	0	0	0	0
Helen	1	1	1	0	1	0
Marie	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Sum	9	6	4	4	5	2

<u>Name</u>	<u>TEACH Scholarship</u>	<u>HRSA Scholarship</u>	<u>WIA</u>	<u>GAMM</u>	<u>TANF</u>
	1	1	1	1	1
Kate	0	0	1	0	1
Rose	1	0	1	0	1
Nicole	0	0	0	0	0
Anne	0	0	0	0	0
Charlene	0	0	0	0	0
Carol	0	0	0	0	0
Betrice	0	0	0	0	0
Chelcy	0	0	0	0	0
Helen	0	1	1	1	0
Marie	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Sum	1	1	3	1	2

<u>Name</u>	<u>EITC</u>	<u>Food Stamps</u>	<u>Sub. Housing</u>	<u>WIC</u>	<u>Medicaid</u>	<u>MC+</u>
	1	1	1	1	1	1
Kate	1	1	1	1	1	1
Rose	1	1	0	0	1	1
Nicole	1	1	0	1	0	1
Anne	1	0	0	0	0	0
Charlene	1	1	0	1	0	1
Carol	1	0	0	0	0	1
Betrice	1	1	0	1	1	1
Chelcy	0	1	0	1	0	1
Helen	1	1	1	0	0	1
Marie	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
Sum	9	7	2	5	3	9

<u>Name</u>	<u>Head Start</u>	<u>Childcare Subsidy</u>	<u>Sum</u>	<u>Health Insurance Status</u>
	1	1	19	
Kate	1	0	11	health insurance through Medicaid
Rose	0	1	14	health insurance through Medicaid
Nicole	1	0	7	no health insurance until 1/08 / employer
Anne	0	0	3	health insurance through employer
Charlene	0	0	5	no health insurance until 1/08 / employer
Carol	1	0	4	no health insurance
Betrice	0	0	9	only has health insurance for pregnancy
Chelcy	0	0	5	no health insurance since 1997
Helen	0	0	11	no health insurance since 2003
Marie	<u>0</u>	<u>0</u>	8	no health insurance
	3	1		

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