THE ROLE OF INTERNAL RESOURCES IN ACADEMIC ACHIEVEMENT: EXPLORING THE MEANING OF SELF-COMPASSION IN THE ADAPTIVE FUNCTIONING OF LOW-INCOME COLLEGE STUDENTS

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Submitted to the Graduate Faculty of

School of Education in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

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Although there are many statistics on low-income students, most focus on deficits. This study is designed to concentrate on strengths, by exploring the role of self-compassion in the academic achievement of low-income community college students. This research, based broadly on resiliency theory, specifically encompasses the Buddhist psychology perspective on the meaning of suffering and self-reflection, in explaining how self-compassion may develop over a period of difficulty, and contributes positively to academic success. Further, this framework is placed within the context of Bronfenbrenner's ecological theory, to differentiate the influence of internal versus external resources, as well as to highlight the role of the chronosystem and its relevance to persistent poverty. Participants were 410 low-income community college students in southwestern Pennsylvania who responded to multiple objective measures to gain insight into academic success despite adversity. An exploratory factor analysis on the Self-Compassion Scale (SCS) was completed with regard to the use of this measure with a low-income population, as well as correlational studies, and a series of multiple regression analyses, to predict academic achievement in low-income community college students. Findings indicate that older students, African American students, students who are parents, and students who have fewer social supports reported more self-compassion. Further, self-compassion acted as a moderating

mediator between income and academic success in students who report a pattern of persistent poverty. This subset of students reported more self-compassion and greater academic success in college.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PREFACE

Completing a project of this size involves the support of many people. I offer my heartfelt appreciation to everyone on my committee, Dr. Heather Bachman for her expertise on poverty and educational attainment, Dr. Carol Greco, for her mastery of Buddhist psychology, Dr. Jane Pizzolato for her sound knowledge of academics and emerging adulthood, and Dr. Eva Shivers for nurturing and coordinating it all! Additionally, I thank Drs. Kevin Kim and Elaine Rubenstein for their willingness to consult on statistical questions, as well as Dr. Bob Faux, for his generous editing advice. I also extend my indebtedness to the administration, faculty, and students of the Community College of Allegheny County, without whom this research could not have been completed. Finally, and most importantly, I thank my husband, Mike, and children, Brian and Katie, who supported my efforts every step of the way.

1.0 BACKGROUND

What are particular reasons that some individuals who grow up in economically disadvantaged backgrounds achieve post-high school success as compared to their peers who do not? I previously conducted a qualitative research study that examined the role of intrinsic motivation in low-income African American females' pursuit of higher education (Conway, 2006). My findings, consistent with Brodsky (1999), Eubanks (2004), and Todd and Worell, (2000), indicated that despite multiple material obstacles and the consistent presence of negative role models, the women in this study were able to succeed in their pursuit of higher education based on internal strength and the desire to provide a better life for their children. It was generally accepted by the participants that education was the key to economic self-sufficiency as well as higher self-esteem. Although external supports, both social and college-affiliated, are vital to low-income college students, internal processes, the private thoughts and feelings of individuals, also appear to play a role in academic persistence and attainment.

The women in the initial study reported some unexpected themes, including the need to be kind to themselves, focus mindfully on their lives, and appreciate a sense of common humanity. I recognized these traits as self-compassion. This study is a follow-up to the previous one, and considers more explicitly the role self-compassion may play in this population's quest for higher education. This time I conducted a quantitative study to examine a larger segment of

the population, and include a broader range of students, both males and females, multiple races and ethnicities, and a broader age range, to more thoroughly analyze this phenomenon.

2.0 INTRODUCTION

It is commonly believed that some individuals who grow up in the midst of adversity fall victim to the negative influences of their environment. Students who grow up in poverty endure limited early learning opportunities, underfunded educational systems, higher rates of addiction and crime, and more health and mental health problems compared to their middle class peers (Duncan & Brooks-Gunn, 1997; Hernandez, 1997; Loury, 2001; National Center for Children in Poverty [NCCP], 2004a). This combination of factors puts them at much greater risk of dropping out of school before completing their high school education. Fewer still will complete higher education (Axinn, Duncan, & Thornton, 1997; Hauser & Sweeney, 2001; Holzer, 2005; Karoly, 2001; Lent, Brown, & Larkin, 1984, 1986; Teachman, Paasch, Day, & Carver, 1997). According to the U.S. Department of Education (2001), of all students who enroll in a community college setting, only 45% complete a degree; only 41% of certificate program (vocational training) students succeed. Those who do not remain in college are most likely to be low-income students of color. Since individuals from poor families consistently fare worse than others according to much research on poverty and education, is it the economic conditions alone that act as determinants of life circumstances? As education is the surest way to traverse the socioeconomic divide this topic is worthy of greater study (NCCP, 2004c, U. S. Department of Labor, 2005).

In contrast, there are many individuals who, despite life's hardships, thrive. They appear strengthened by these events. What helps them to cope? What allows them to move beyond the

day-to-day difficulties and push ahead to achieve success? What are the factors that aid in their evolution to a new and different life? How does an individual's economic well-being affect developmental outcomes? The immediate effects of poverty are well documented (Duncan & Brooks-Gunn, 1997; NCCP, 2003a). However, there is less evidence of long term consequences (Corcoran, 2001; Hauser & Sweeney, 1997; Karoly, 2001). We need to be cautious in regarding economic circumstances alone as determinants of life circumstances, as the question is much more complex.

This is a study attempting to test a new marker of internal resourcefulness as related to educational attainment. Much focus has been placed in recent years on educational reform. In 1983 The National Commission on Excellence in Education published "A Nation at Risk," acknowledging a national educational crisis. However, despite several decades of attempts to transform the American education system, there is little evidence of improvement, particularly in lower socioeconomic communities (Damon, 1995). Perhaps reform efforts have not addressed the root of the problem. In order to experience academic achievement, students may need to possess inner qualities that enhance their ability to perform academic tasks (Aseltine & Gore, 2005; Danziger, Carlson, & Henley, 2001; DiCesare, 1992, Follins, 2005; Gerardi, 2005, Morgan-Gardner, 2005). This research study explores this possibility, looking specifically at the role of self-compassion as a possible underlying motive for academic achievement (Neff, 2003b). The knowledge that might be gained from studying this inner resource may be useful in aiding less academically resilient students in developing adaptive techniques as well.

3.0 THEORETICAL FRAMEWORK

This research is based broadly on a resiliency framework, though encompasses two additional, and perhaps at the onset, unrelated models, in illustrating a possible pathway of resiliency in adult development. It is placed within the context of Bronfenbrenner's ecological theory to demonstrate the influence of the external environment in human development, focusing on our interdependency with the external world, as well as the role of the chronosystem and its relevance to persistent poverty. Next, to illustrate the necessity of internal resources in resiliency, relevant concepts from Buddhist psychology are presented. The meaning of suffering and self-reflection is used in explaining how self-compassion may develop over a period of difficulty, and contribute positively to success despite adversity, including academic success.

3.1 RESILIENCY THEORY

In exploring students' achievements despite adversity, resiliency theory is employed, especially the work done in this framework in the last 25 years (Garmezy, 1991; Luthar, Cicchetti, & Becker, 2000; Masten, 1994, 2001; Masten & Coatsworth, 1998; Rutter, 1985, 1987; Smith & Carlson, 1997; Walsh, 2003; Werner & Smith, 1982, 1992, 2001). An important distinction in this study is the emphasis on the role of resiliency in adult development rather than in early

childhood, where most studies on resiliency have focused (Garmezy, Masten, & Tellegen, 1964; Luthar, 1991; Luthar & Zieglar, 1991; Luthar et al., 2000; Masten & Coatsworth, 1998; Rutter, 1985, 1987). Resiliency is defined as the ability to bounce back, or to recover from, life's hardships. This concept is a relatively new notion in psychology. Traditionally, social scientists have emphasized deficits rather than strengths when determining a person's level of functioning. However, in recent years there has been more emphasis on constructive behaviors as opposed to maladaptive conduct. This strengths-based approach is more useful in aiding students, educators, and mentors in understanding the actions they may take in building success, rather than employing the prior tactic of identifying weaknesses.

There are two components to resiliency; there is initial exposure to risk or adversity (e. g. poverty), and then, a positive adaptation to the experience (e.g. self-compassion, academic achievement). Both risk and resiliency can be static (e.g. race/ethnicity, gender) or ongoing (persistent poverty, dysfunctional families, inadequate educational systems) (Glicken, 2006). According to Luthar and colleagues (2000) this is a dynamic developmental process that occurs over time. The recognition of resilience has begun to overturn the negative assumptions and deficit-focused theories about those growing up in poverty by focusing on strengths and successes (Garmezy, 1991; Glicken, 2006; Masten, 2001; McEwen, 1998). Understanding resilience is the key to knowing how individuals successfully cope with difficult life events and why they often come out of a crisis emotionally stronger and more certain of their goals and direction in life (Glicken, 2006).

3.2 BRONFENBREENER'S ECOLOGICAL THEORY

Analyzing adversity can be done by examining human development as an ongoing interaction between person and environment. Bronfenbrenner's (1979) work in human ecology illustrates this view, and will be another lens through which I begin to frame this research. Bronfenbrenner believed that development in the context of the milieu created "a lasting change in the way a person perceives and deals with his environment" (p. 3). Thus, poverty, inadequate educational systems, familial, and extrafamilial supports, all part of the microsystem, are perceived to have impact on the psychological development of a person. The person is not viewed as a passive recipient of experiences in these settings but as a co-constructer of life. Other simultaneous layers of influence create even more complexity. The mesosystem involves interactions between microsystems, such as family to school or neighborhood. The exosystem creates social situations in which an individual does not have an active role but may be affected by external influences, such as governmental or educational policies. The layer having the most external impact is the macrosystem, which entails the culture, attitudes, and ideologies in the society in which the individual lives, (e.g. poor people are lazy, less intelligent). The concept of the chronosystem, a late addition to this theory, is particularly pertinent to this study, as it includes temporal patterns in one's environment that may affect development. Thus, long term stress, such as persistent poverty, can have a particularly profound impact on a person's internal development, according to Bronfenbrenner.

3.3 BUDDHIST PSYCHOLOGY

To better understand resiliency in emerging adulthood, this study will also be framed within the context of Buddhist psychology. In recent years, Western psychology has increasingly encompassed Eastern philosophy in attempting to better understand stress and dysfunction (Epstein, 1998; Kabat-Zinn, 1990, 1994; Kornfield, 1993; Simmons, 2002). Buddhist psychology uniquely explains how the mind creates and deals with suffering and disequlibrium (diSilva, 1986, 2005; Kalupahana, 1987; Neff, 2003b). According to Buddhist theory, suffering is caused by attachment to fixed beliefs about the self, particularly unexamined assumptions that we perpetuate (DiSilva, 1986, 2005; Gunaratna, 1968). However, ongoing self-reflection into the nature of our suffering allows for internal transformation (Gonaratna, 1968; Kongrul, 2005). The classic story of Buddha illustrates that it was the understanding of suffering that inspired his search for self-determination. When we face difficulties, rather than avoid or give in to them, it forces us to uncover inner resources we may never have known. We become more self-reflective as we tune into the experience of suffering, over time depersonalizing it, and ultimately liberating us from negative emotions, guiding our life in a new direction (diSilva 1986, 2005; Kalupahana, 1987). This openness to possibility generates humility, contentment, and self-compassion (Ekman, Davidson, Ricard, & Wallace, 2005; Kongrul, 2005; Leary 2003, 2004; Neff, 2003b). A new path is realized as we let go of feelings of fear and vulnerability and gain confidence. Self-compassion changes our mental attitude, as we lose our self-pity and self-absorption (Leary, 2003, 2004; Neff, 2003b). We are transformed from the inside out. We begin to feel more resilient and take action toward our goals (Ekman et al, 2005; Neff, 2003a; Neff, Hsieh, & Dejitterat, 2005). Thus, those who experience ongoing suffering may develop internal

resources with which to reframe life's hardships and propel themselves toward the future by continually reflecting and readjusting their life's circumstances.

It is the contention of this research that self-compassion may be reflected in educational achievement for this reason, as those who experience a period of poverty-related stress develop increased wisdom, discipline, and goal direction.. Prior research has shown that emotions about the self play a role in academic achievement, goal configuraton, and persistence (Joorman, 2005; Leary, Adams, & Tate, 2005; Linnenbrink & Pintrich, 2002; Neff et al, 2005; Turner, Husman & Shallert, 2002). Although society has traditionally emphasized the role of high self-esteem to this end, it may be more important to have self-compassion, the ability to treat oneself kindly in the face of failure, rejection, defeat and other negative events (Leary et al., 2005).

3.4 COMPOSITE FRAMEWORK

The external world impacts development over time. However, individuals are both creations and creators of their own environment as they tread upon their life course. As we begin to internalize life experience and reflect on the impact of the outside world, we may change, becoming more self-compassionate and resilient. The focus of this study will particularly consider the person as an individual, uniquely experiencing his or her own developmental process over time. In most research, little attention is paid to self-experience or the outcomes from this internal perspective. This theory will emanate from this view (see Figures 2 and 3).

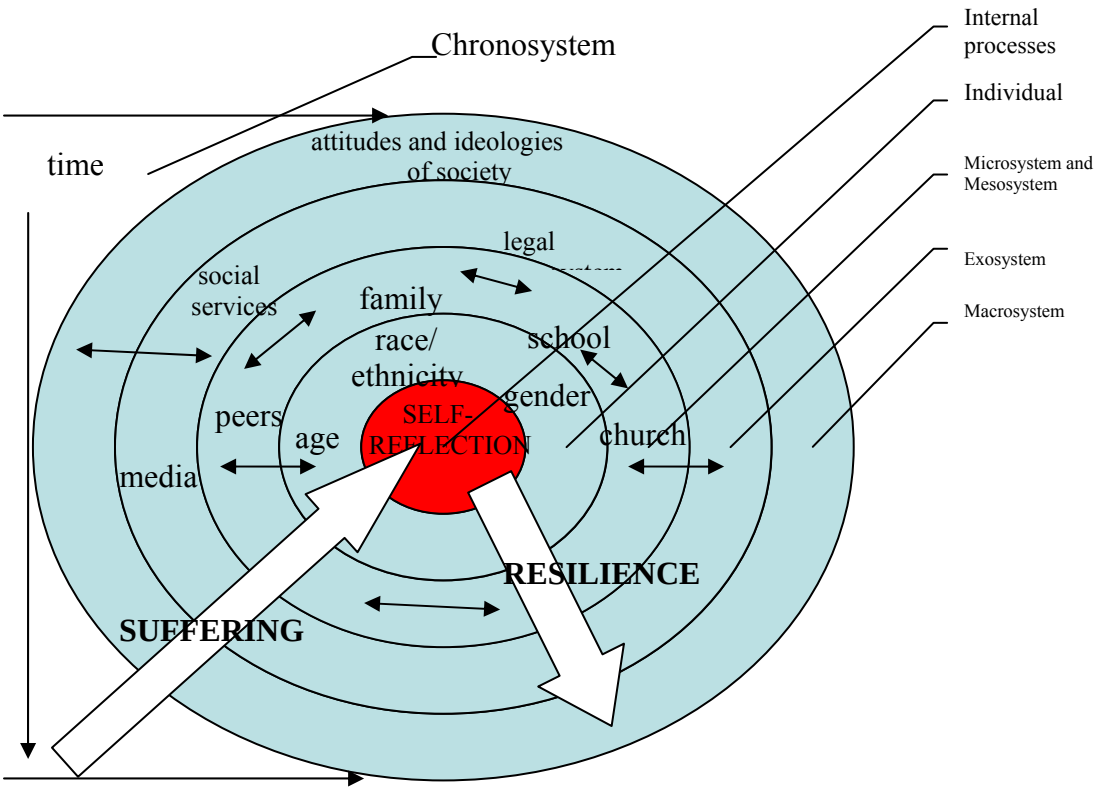

Figure 1 *Composite Framework*

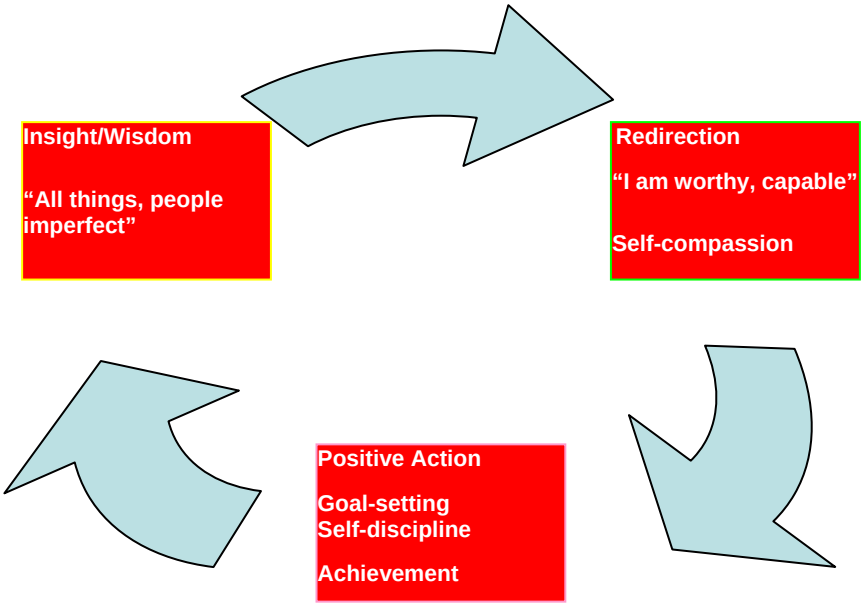

Figure 2 *Inner Circle: The Process of Self-Reflection*

4.0 REVIEW OF THE LITERATURE

I will now review the current literature on poverty, educational attainment relative to low-income students, and the role of self-compassion, in preparation for identifying the statement of the problem and the research questions characterized in this study. (For definitions of key constructs described in this study, please see Appendix A).

4.1 POVERTY

The role of suffering is hypothesized in this research study to be a key element in producing internal changes via self-reflection and self-compassion, translating into academic achievement for some low-income students. Poverty creates a myriad of stressors which will be clearly identified in this section. Demographics and background information on poverty will be offered, along with specific data on poor people of color, who are a focus of this study. The net effect of poverty will be discussed, as well as the various pathways that poverty may take. Persistent poverty, which is of particular concern, will be explained; and lastly, the psychological effects of poverty will be highlighted.

Children are dependent on their parents for financial support. They are poor by virtue of their parents' economic limitations. However, they are harshly affected at times by this set of circumstances. Children from poor families consistently fare worse than other children (Burtless,

& Smeeding, 2001; Corcoran, 2001; Duncan & Brooks-Gunn, 1997; Hanson, McClanahan, & Thomson, 1997; Haverman, Wolfe, & Wilson, 1997; Korenman & Miller, 1997; Lipman & Offord, 1997; Loury, 2001; Mayer, 1997; Pagini, Boulerice, & Trembley, 1997; Smith, Brooks-Gunn, & Klebanov, 1997). The consequences of growing up in poverty are numerous, and may extend into adulthood. The dollar amount of a family's income is at issue. However, the timing, depth, and duration of this experience may have varying impacts on the future of the affected child

4.1.1 Demographics and Background

Individuals who grow up in an environment that is economically disadvantaged are at particular risk. For a family of four, the United States government defines the poverty threshold as a yearly income of below $20,000 (U.S. Census Bureau, 2006). Low-income families are defined as families whose yearly income is less than twice the poverty level ($40,000), the minimum necessary to meet basic needs according to economists. Individuals from racial and ethnic minority groups, single-parent households, those living in the rural south or west, and people whose parents have lower levels of educational attainment are most likely to be living in poverty (NCCP, 2004a). Impoverished conditions may create an environment that is less conducive to future success. Poverty has been correlated with lack of educational opportunity, poor quality child care, residential and neighborhood hazards, deficient health care, and nutritional concerns (Axinn et al., 1997; Brooks-Gunn, Klebanov, Liaw, & Duncan, 1995; Hanson et al., 1997; Korenman & Miller, 1997; Mayer, 1997; National Institute of Child Health and Development [NICHD] Child Care Research Network, 1997; Pagini et al., 1997; Smith & Carlson, 1997; Smith et al., 1997; Teachman, et al., 1997). There are also higher rates of mental health

problems, drug and alcohol addictions, and criminal activities in communities without opportunity (Conger, Conger, & Elder, 1997; Corcoran, 1995, 2001; D'Ercole, 1988; Duncan & Brooks-Gunn, 1997; Freeman, 2001). These very real distractions do not allow families to focus on educational attainment. An adequate income allows parents to provide their children with greater opportunities, including a safer, more stimulating home environment.

4.1.2 African Americans and Poverty

African American children are more likely to be poor, and for longer periods of time (Brooks-Gunn, Duncan, & Maritato, 1997; Corcoran, 2001; Corcoran & Adams, 1997; Hernandez, 1997; Loury, 2001). According to the U. S. Department of Labor (2006), more than half of all low-income households in the United States are headed by single mothers, and are often families of color. African American women who head households are most likely to live in poverty.

4.1.3 The Net Effect of Poverty

There is a recognized link between poverty and child well-being, although there is a question as to whether this is the result of income in isolation or poverty- related factors. Income alone may not be the best measure of impoverishment. A simple measure of economic status based on conventional government figures fails to portray discrepancies in important outcomes. Many studies on those living in poverty cite the greater concerns of household structure, parent age, parent education and unemployment as the true issues provoking the effects of poverty (Axinn et al.., 1997; Corcoran, 1995; Corcoran & Adams, 1997; McLanahan, 1997). Families living in poverty are often headed by young, single mothers, parents with lower levels of educational

attainment who are unemployed or underemployed, and who may have inconsistent, poor quality child care (Connell, 1994; McLanahan, 1997; McLeod & Kessler, 1990). These factors can create an environment which is chaotic, less structured and has less verbal interaction (NICHD, 1997). An inadequate income may result in family stress that produces negative consequences for the emotional well-being of those within the home environment (Axinn et al., 1997; McLoyd, Ceballo, & Mangelsdorf, 1996; Teachman et al., 1997). Lack of emotional support is correlated with less involvement in the lives of children and a poorer quality homelife. (Axinn et al., 1997; Cancian & Reed, 2001; Conger et al., 1997; Corcoran, 2001; Hanson et al., 1997; McLanahan, 1997). Parents' economic resources can indirectly bring status or lack of status and respect to families (Connell, 1994). Additionally, those living in high crime neighborhoods, abusive households, or homeless families may feel anxious regarding their personal safety (Hauser & Sweeney, 1997; Jarrett, 1995, 1997).

4.1.4 Poverty's Pathways

Pathways refer to routes through which poverty may negatively affect adult outcomes. They are possible links between a low-income and a less than desirable conclusion. Extensive research summarized by Duncan and Brooks-Gunn (1997) reveals five possible leverage points through which intervention might occur to ameliorate the harmful impacts of poverty, consistent with many avenues of Bronfenbrenner's theory. These areas are health and nutrition, neighborhood conditions, the home environment, parent-child interactions, and parental mental health.

Health disadvantages by poor children include issues such as frequent ear infections, elevated blood lead levels, and low weight from birth. These factors have been proven to negatively affect cognitive ability and thus school achievement (Korenman & Miller, 1997).

Neighborhood choices are limited for those living below the poverty level. Residential communities without recreational facilities, parks, playgrounds, and those with higher rates of crime are associated with fewer learning opportunities and thus limited academic achievement (Hanson et al., 1997; Lipman & Offord, 1997; Mayer, 1997).

Cognitive ability may also be negatively affected by lack of learning opportunities within the home, as lack of reading materials and age appropriate play activities are not available (Axinn et al., 1997; NCCP, 2004c; Pagini et al., 1997; Peters & Mullis, 1997; Smith et al., 1997; Teachman et al., 1997)

Parental interactions with children are of further concern. Certain parent practices such as harsh discipline and familial conflict have correlated with negative mental health and school achievement according to researchers (Hanson et al., 1997; McLanahan, 1997).

Finally, poor parents are shown to be less mentally healthy than their nonpoor counterparts. Parents who are irritable or withdrawn are associated with worse child outcomes cognitively, socially, and emotionally (Brooks-Gunn et al., 1997; D'Ercole, 1988; Hanson et al., 1997; NCCP, 2004a).

4.1.5 Persistent Poverty

Persistent poverty is of gravest concern. Many individuals move in and out of lower income brackets, but those children who spend a significant portion of their childhood in poverty, estimated by experts as four or more years, are especially connected to negative outcomes (Duncan & Brooks-Gunn, 1997; Burtless & Smeeding, 2001; Corcoran, 1995, 2001; Jarrett, 1995). Poverty persists across generations at times. Research on the effects of poverty on human development has consistently shown that the duration of time individuals live in impoverished

conditions will have a great impact on life outcomes. Family income in childhood appears particularly correlated with academic ability and achievement (Duncan & Brooks-Gunn, 1997; Pagini et al., 1997; Smith et al., 1997).

4.1.6 Poverty's Psychological Effects

Although poverty is an economic problem, it manifests itself in many different forms, both materially and nonmaterially. Poverty has psychological effects. Feelings of humiliation, discrimination, exploitation, shame, fear, and lack of power result from consistently difficult living conditions (McLoyd, et al., 1996; Narayan & Walton, 2000; White, 2004; Wray & Newitz, 1997). Brown (2005) argues that poverty is incorporated into the adult identity, as people are told they are "no good, inadequate, dirty, incompetent, and stupid" (p. 396). Erikson (1980) defined identity as "a process of defining oneself relative to shared characteristics with others." Consequently, a negative self-image may emerge as one continually associates oneself with the lesser things in the environment. Brown theorizes that it is important to address these images as well as the external stressors of poverty in making long term change. Poverty negatively impacts identity, which in turn may affect persistence and related academic achievement, as people who are lacking a sense of identity may be less motivated to set goals leading to higher education.

Self-attitudes also play a role in understanding the psychological impacts of poverty and its far reaching effects. Self-esteem is defined as the "central evaluative component of the self and reflects the extent to which individuals believe they are worthwhile and merit respect" (Axinn et al., 1997). Those individuals with internalized self-respect, a sense of personal worth, and a positive evaluation of themselves will perform better than those who believe they are less

worthy based on their status of living in poverty. Self-esteem is a determining force in subsequent academic achievement based on these internal feelings (Axinn et al., 1997).

Another concern related to the psychological effects of poverty is mental health illness. Research has repeatedly demonstrated that poor children have significantly more psychosocial problems than their nonpoor counterparts (Lipman & Oxfford, 1997; Haverman et al., 1997; NCCP, 2004a; Pagini et al., 1997). There is a significant association between poverty and one or more psychological disorders, including Attention Deficit Hyperactivity Disorder (ADHD), conduct disorders, and emotional disorders. These detrimental behaviors negatively impact school performance and achievement (Peters & Mullis, 1997; Teachman et al., 1997).

Of further concern, these issues may not resolve as these individuals grow up, creating adults with impairments (Duncan & Brooks-Gunn, 1997; Hauser & Sweeney, 1997; NCCP, 2004a). Specifically, low levels of achievement, ongoing dependency, and lack of social supports contribute to the negative psychological impacts of persistent poverty. Persistent barriers to educational and work attainment may create long terms effects with regard to self-esteem, motivation, and general psychological well-being (White, 2004). Olson and Pavetti (1996) report that there is a direct correlation between depressive symptoms and length of time adults remain on public assistance, thereby perpetuating poverty. A comparison of welfare recipients who have left the system and those who remained showed that those who left were more likely to have positive self-attitudes and lower rates of depression (Loprest, 1999). Other research corroborates findings that psychological functioning related to poverty may have an impact on postsecondary education and employment (Danzinger, et al., 2001; Lennon, Blome, & English, 2001). I will explore this issue in more depth in the following section.

4.2 EDUCATIONAL ATTAINMENT

Education is often viewed as the primary key to socioeconomic success. A high school diploma is the minimum level of attainment necessary for securing entry level jobs with career potential (NCCP, 2004b). Persons with post high school education have higher wage rates, obtain greater fringe benefits, and are less likely to be unemployed (Haveman et al., 1997; Holzer, 2005; Mayer, 1997; NCCP, 2004b, 2004c; Timpane & Hauptman, 2004; U. S. Department of Labor, 2005). Higher levels of education also yield a variety of important social gains including job prestige, self-respect, self-esteem, and the possibility of raising children who are likely to receive more education (Haveman et al., 1997; Mayer, 1997). For these reasons, identifying factors that positively influence an individual's educational attainment is of considerable interest. Currently, the educational level of European Americans exceeds that of African Americans both at the high school and college level (Haveman et al., 1997). A great deal of research demonstrates that educational attainment is the key to what happens to a person later in life (Aseltine & Gore, 2005; Astin, 1992; Autor & Katz, 1999; Corcoran & Matsudaira, 2005; Hauser, et al., 1997, Haverman et al., 1997; Osgood et al., 2005; Sandefur, Eggerling-Boeck, & Park, 2005; Teachman, 1997). The amount and quality of education is associated with occupation, income, lifetime earnings, wealth accumulation, whom and when a person marries, and the well-being of their children. The country also benefits from a more educated citizenry (Sandefur et al., 2005).

4.2.1 Current Educational Status of the Poor

Although attention has often focused on "the culture of poverty" and its implication of negative attitudes toward work and education, the majority of poor individuals, 56%, are employed full-time, though in low wage jobs (NCCP, 2004b). Lack of education, due either to limited opportunity or negative views of their own educational experience, is the reason for such low wages (Astin, 1992).

Despite forays into the workforce, public assistance remains a necessity for some low-income families. Recent changes in welfare legislation have drawn more attention to low-income, single mothers and their association with public welfare. In 1996 when Congress and President Bill Clinton passed the Personal Responsibility and Work Opportunity and Reconciliation Act (PRWORA), time limits were imposed on recipients of welfare benefits. Since that time, a variety of "welfare-to-work" programs have emerged throughout the country in response to the drive to remove people from the welfare rolls and place them in work settings (Achieving the Dream [ATD], 2006a; Keystone Education Yields Success [KEYS], 2006; U.S. Dept. of Labor, 2000). In the first year after welfare reform laws were passed, states were required to have 25% of their caseload participating in countable activities. By 2002, states were expected to meet work participation rates of 50% (The Brookings Institution, 2004). Job training for those who have not yet developed marketable skills is now a national priority. Thus, those who are unemployed or underemployed have renewed opportunities to pursue higher education. Programs, such as those offered at community colleges, that provide two years or less of college or vocational training in health and technology-related fields are at the forefront of this movement.

4.2.1.1 The Role of Community College

Employment and earnings are strongly correlated with educational attainment (Autor & Katz, 1999; Blank & Schmidt, 2002). According to the U. S. Department of Labor (2005), high school graduates who have not sought additional education earn lower wages than college-educated individuals. Thirty seven percent of minimum wage earners ($5.15 an hour) are high school graduates. Those who have achieved an Associate's degree make up only 9.9% of minimum wage earners. In the past two decades, the percentage of low-income families increased from 38% to 43% if parents had a high school degree, but no college education. The percentage decreased from 18% to 15% for those who had at least some college education (NCCP, 2004c). Racial and ethnic minorities remain underrepresented in post secondary education. According to recent research conducted by the National Center for Education Statistics however, these students are disproportionately represented in 2 year college programs (Bailey, Jenkins, & Leinbach, 2005).

Community colleges now enroll nearly one half of all entering college students, and matriculate one third of all U.S. college students (Timpane & Hauptman, 2004). Low-income women make up slightly more than one third (34.9%) of all women students at the current time, the majority attending 2-year colleges (Center for Women Policy Studies [CWPS], 2004). Nearly three quarters of these women (72.5%) are unlikely to have the financial support of a parent or spouse, and more than half (59.1%) are parents (CWPS, 2004). Many of these women are working as well as going to school; 78.3% of low-income women work while attending college, 40.3% work full-time (CWPS, 2004).

Community colleges are open enrollment institutions. Access alone, however, is not enough. Unfortunately, the U.S. Department of Education (2001) reports that of all students enrolled in a community college, less than one half achieve their educational goals. Nationally, of all community college students who seek an associate's degree, only 45% attain this goal. Of those students enrolled in a certificate program, oriented toward a particular job or industry, only 41% complete this goal. Community colleges educate students who are likely to face personal, financial, and academic challenges, and are the same students who were not served well by their previous academic institutions and therefore have the greatest academic needs. Those facing the greatest barriers are students of color and low-income students. Thus, they lose the opportunity to learn and to earn a viable wage.

4.2.1.2 Available External Resources

To turn this tide of lesser academic achievement in low-income students, supportive services have been implemented for high risk students. There are government programs as well as programs implemented by private foundations. Job Corps is the nation's oldest and largest federally funded job training and education program for economically disadvantaged individuals (U.S. Department of Labor, 2000). Students who are enrolled in Job Corps work individually with counselors to design personal career plans to help ensure commitment and success. Students receive tuition and fees for up to 2 years of college or vocational training, which often occurs at a community college. Other services provided include child care, transportation assistance, books, and career counseling and job placement. A report by the U. S. General Accounting Office (GAO) (1995) addressed concerns regarding attrition in the program, particularly for those students with dependents, and students of color. Program completion rates range from 13% to

nearly 50%, with an average of 34% (GAO, 1995). A qualitative study completed to address these concerns identified intrinsic difficulties among this cohort, including lack of confidence, lack of self-efficacy, lack of connectedness, and lack of motivation (U. S. Department of Labor, 2000).

The Keystone Education Yields Success (KEYS) program, is an initiative sponsored by the Pennsylvania Department of Public Welfare (DPW) designed to aid welfare recipients in attending and succeeding in community college. KEYS provides a program facilitator on site at the college to aid students in achieving their career goals by providing career counseling, tutoring, academic support, and help with securing financial aid, as well as assisting in coordinating other available services through the county public assistance office or other community agencies (KEYS, 2006). Data is not yet available on KEYS students as they are just now entering their second year.

The Achieving the Dream Initiative is a national initiative to help more community college students succeed. This program is particularly focused on low income students of color, as they have faced the most barriers to success. After baseline data is collected on the high risk students, individual schools adopt strategies for improvement based on their findings. Many colleges participating in this initiative are emphasizing developmental coursework. Other tactics include instructional techniques, such as collaborative learning and paired classes; student success courses which teach critical skills such as time management and study skills, tutoring, and advising services (Achieving the Dream, 2006a). They also attempt to make financial aid more available. First year students in the 2002 original Achieving the Dream cohort realized a 29% completion rate. African American students had the lowest completion rate; European American students the highest (Achieving the Dream, 2006b). A report issued by Achieving the

Dream (2006b) explained that a large portion of first year students had "enrollment patterns that are associated with reduced chances for success" (p. 3). Ongoing data collection and adjustments to the program hope to ensure increased numbers in the future (Achieving the Dream, 2006b).

Although it is certainly necessary to provide low-income students with the external resources they need to have success at a post-high school level, the above data on the mediocre success rates of these programs reveals that something more is needed. What else beside external support systems may aid in the academic achievement of community college students? The study on Job Corps (U. S. Department of Labor, 2000) suggests internal strengths are also required. In the following section I will explore this option in more detail.

4.2.2 Internal Resources and Educational Attainment

There are economic, cultural and educational barriers that keep low-income students from pursing higher education (Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; Graham, 1994; NCCP, 2004c). What inspires students to continue their education? Recent research has shown that a student's internal resources are a better predictor of post high school success at the community college level than traditional cognitive ability or other support programs (Aseltine & Gore, 2005; Danziger et al, 2001; DiCesare, 1992, Follins, 2005; Gerardi, 2005, Morgan-Gardner, 2005; Pintrich & DeGroot, 1990; Pintrich & Garcia, 1991). Those students who believe they can achieve their desired aspirations are best able to invest in themselves, set and achieve goals, and overcome the academic stresses of postsecondary education to succeed. Thus, it is important for us to better understand those processes happening inside a person that lead to academic success in low-income students.

4.3 SELF-COMPASSION

As the theme of internal strengths appears to be an especially promising area of study with regard to academic resiliency, it will be further explored here. Although there are several constructs relevant to internal resources that have been identified in the literature, I am interested in the study of a potential new marker of academic success, self-compassion.

4.3.1 The Meaning of Self-Compassion

A construct that has not been tied as directly to the current research on academic success is self-compassion. Self-compassion is a Buddhist concept that implies being emotionally warm and forgiving to oneself. Much like a compassionate person is moved by the suffering of another, this term implies taking an open-minded attitude towards oneself, as opposed to an attitude of harshness or criticism. Self-compassion, which develops after a period of suffering and self-reflection, involves adopting an understanding, nonjudgmental attitude toward one's own inadequacies and failures, feeling an optimistic desire for one's own welfare, and recognizing that one's outcome is part of a shared human experience (Neff, 2003b).This openness to experience is related to seeing one's own experiences as connected to those of others who are also suffering, thus putting circumstances into a larger perspective (Neff, Kirpatrick, & Rude, in press). Self-compassion is different in important ways from attributes such as self-pity or self-indulgence, which stem from more narcissistic motivations. Self-compassion also calls for taking a balanced approach to our negative sentiments so that painful feelings are neither suppressed nor embellished. It has been correlated with adaptive functioning, relative to happiness, wisdom,

optimism, personal initiative, curiosity and exploration, as well as overall positive psychological well-being (Neff et al., in press).

In many ways self-compassion can be viewed as a useful emotional regulation technique in which distressing feelings are not avoided but are instead perceived with awareness and a sense of shared humanity. Thus, negative emotions are transformed into a more positive emotional state, allowing for a clearer understanding of one's immediate situation and the adoption of actions that change oneself and the environment in appropriate and effective ways (Folkman & Moskowitz, 2000; Isen, 2000, Neff, 2003b; Rosen, 2006). For this reason, self-compassion may be an important aspect of emotional intelligence, which involves the ability to monitor one's own emotions and to apply this insight to guide one's thinking and actions (Neff, 2003b; Salovey & Mayer, 1990; Sheldon, Ryan, Deci, & Kasser, 2004).

Further, as Neff (2003b) has reviewed, self-compassionate individuals should evidence better mental health outcomes than those who lack self-compassion, because their experiences of pain and failure are not amplified and perpetuated through harsh self-condemnation (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982), feelings of isolation (Wood, Saltzberg, Neale, & Stone, 1990), or over-identification with thoughts and emotions (Nolen-Hoeksema,1991). Also, having empathy for oneself implies that individuals may try to prevent the experience of suffering in the first place, giving rise to proactive behaviors aimed at promoting or maintaining well-being (Neff, 2003b).

4.3.2 Distinct From Other Self-Attitudes

Self-compassion has been utilized more recently as an alternative to the construct of self-esteem. For many years, mental health professionals have emphasized the importance of positive self-

esteem, though recently psychologists have argued that an overemphasis on evaluating and liking oneself may lead to narcissism, self-absorption, self-centeredness, and a lack of concern for others (Damon, 1995; Finn, 1990; Seligman, 1995). Rather, the concept of self-compassion is more analogous to other paradigms that have developed as alternatives to self-esteem such as "true self-esteem" (Deci & Ryan, 1995, 2000) or "authentic self-esteem" (Kernis, 2003), which advocate a sense of self-worth that is unrelated to outcomes but is an inherent aspect of being. Neff et al. (in press) also point out that the concept of self-esteem is absent from the list of psychological strengths that are the focus of the current positive psychology movement (Seligman & Csikzentmihalyi, 2000), which chooses to develop intrinsic worth rather than embellish the self. Whereas a strong sense of self-acceptance is inherit to self-compassion these feelings are not based on a judgment of the self or comparisons with others. Rather, the focus is on recognizing the imperfect and vulnerable nature of the human condition, integrating feelings of social relatedness. Emotional equilibrium also results from self-acceptance in a way that is unique from other self-attitude constructs as one does not have to develop an inflated view of one's talents or self-worth to be self-compassionate (Neff, 2003a). Research by Swann (1990, 1996) reports that an inflated sense of self is a major reason why self-esteem enhancement programs often fail.

Research by Neff et al. (in press) indicated that self-compassion has a negative association with self-criticism, depression, anxiety, ruminating thoughts, repressed thoughts, and self-pity, where individuals get absorbed in their own problems, forgetting that others experience similar problems. Rather, self-compassion involves a self-reflective process that discourages self-absorption and overidentification with one's problems and encourages a nonjudgmental attitude toward one's failures or inadequacies, and is positively associated with connectedness,

self-determination, emotional intelligence, positive emotional health, and subjective well-being. Her findings further indicate that self-compassion is highly correlated with self-esteem, though unlike self-esteem is not correlated with narcissism.

4.3.3 Self-Compassion Relevant to Educational Attainment

Although there has been little research done in the area of self-compassion relevant to educational attainment, there are theoretical reasons to believe that self-compassion may positively impact the academic process. Self-compassion focuses on the emotional attitude individuals take toward themselves when confronted with an experience of suffering or failure. According to this construct, judgment does not entail performance evaluations of the self or others, or aligning oneself with idealized expectations. Thus, the self is not assessed and then valued or devalued according to performance outcomes. The entire self-evaluation process is circumvented (Neff et al., 2005). Self-compassion allows individuals to reframe failure, identifying the potential for growth. Based on this perspective, self-compassion may be linked with various positive outcomes throughout the lifespan. One intriguing area, although more research is needed, is the correlation between self-compassion and academic achievement.

A study by Neff and her colleagues (2005) examined the correlation between self-compassion and academic achievement goals among college students, to determine whether self-compassion might be adaptive in academic settings. Their results showed that self-compassion was positively associated with mastery goals, which include the joy of learning for its own sake, the desire to develop skills, master concepts, and understand new material, and was negatively associated with performance goals, based strictly on outcome (Neff et al., 2005). Those who demonstrated more self-compassion viewed making mistakes as part of the learning process,

rather than a measure of self-worth. Their analysis reveals that self-compassionate students experienced a lower fear of failure and greater perceived expertise in learning situations. Though self-compassion was not directly tied to competence as defined by grade point average, it appeared to be underlying academic success via motivational patterns. Self-compassion affords students the needed emotional resiliency when faced with failure and aids in fostering adaptive academic goals (Neff et al., 2005).

The research from this first study by Neff and her colleagues was replicated by the authors in a naturalistic setting, with students who had recently perceived failure on a midterm exam. A strong positive correlation was found between self-compassion and intrinsic motivation and perceived competence. A significant positive correlation with self-compassion and mastery goals was again found. The results also indicated that self-compassionate students exhibited more adaptive ways of coping with failure (Neff et al., 2005). These students were more able to see failure as part of the learning process, rather than becoming consumed with fears of failure or low self-worth. According to Neff et al. (2005), "Self-compassion helps to facilitate the learning process by freeing individuals from the debilitating consequences of harsh self-criticism, isolation, and over-identification in the face of failure, and instead provides students with self-kindness, a sense of common humanity, and emotional balance. This constructive attitude toward the self appears to help students focus on mastering tasks at hand rather than worrying about performance evaluations, to retain confidence in their competence as learners, and to foster intrinsic motivation" (p. 283-4). It is my hypothesis that students may also achieve academic success through the process of self-compassion. Poor community college students, unlike traditional college students, may develop self-compassion through the continual experience of suffering. This may translate into mastery of academic subjects, which can allow them to have

success in their academic performance as well.

Research by Leary et al. (2005) also explored the role of self-compassion with college students. They conducted three studies that consistently showed self-compassion is beneficial in helping students cope with negative events in ways that are often different from and better than high self-esteem. Their findings illustrated that those with higher self-compassion were more likely to think "Everybody goofs up now and then" and less likely to think "I am such a loser" (Leary et al, 2005). Further, this interpretation of life provides a buffer against negative events, having positive cognitive and emotional effects.

While the small amount of research conducted so far on self-compassion is encouraging, and may prove useful in guiding more students toward educational attainment, further research needs to be done. The purpose of the current study is to explore self-compassion in a low-income student population.

5.0 STATEMENT OF THE PROBLEM

Poverty has many detrimental effects on people, which may last throughout the lives of those affected. Academic achievement is an area that is particularly noted as having been negatively impacted. Too many people growing up in poverty prematurely end their formal education, and thus do not escape the socioeconomic difficulties associated with low-income living. However, higher education via a community college is one opportunity that is available to all students to aid in their move toward economic self-sufficiency. What can we do to support more adults in choosing this goal? Traditional attempts at educational reform for "at risk" populations have been limited in their success. However, some members of our society have shown academic resiliency despite inadequate external supports. It appears that internal resources may be central in achieving educational success despite adversity. I argue that self-compassion, a little studied construct, may be associated with success in low-income community college students. To this end, I will pursue several research questions.

5.1 RESEARCH QUESTIONS

The questions identified for the purpose of this study are as follows:

a) What are the psychometric properties of the Self Compassion Scale with low-income community college students?

b) Does a person's level of self-compassion differ based on demographic variations?

c) Is there a difference in the academic success of community college students as a function of income level?

d) Do internal resources, specifically self-compassion, contribute to the prediction of academic success after taking demographics and external resources into account?

5.2 CONCEPT MAP

It is proposed that if income is significantly associated with academic success, and income influences self-compassion, and self-compassion influences academic success, then self-compassion must be a mediating variable between income and academic success (see Figure 3).

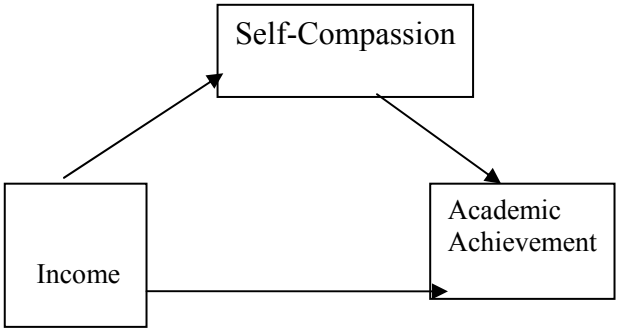

Figure 3 *Concept Map*

5.3 HYPOTHESES

I hypothesize that although external resources, such as tutoring services and child care, are important to community college students, their own internal resources, specifically self-compassion, may add an important variable to the prediction of academic success. Additionally, I expect to see that poor students who score higher on a measure of self-compassion will also be more successful academically. Finally, I also believe that self-compassion will be even more important to the academic success of low-income students of color, and older, nontraditional students based on my prior research.

The research methods I undertook to answer these questions are described next.

6.0 METHODS

6.1 PARTICIPANTS

The sample for this study is comprised of 410 primarily low-income students from the Community College of Allegheny County (CCAC) in southwestern Pennsylvania, with the cooperation of the college. This educational facility is a two-year open enrollment postsecondary institution whose mission is to "make quality education affordable and accessible to the community, and to provide leadership in workforce training and support the economic development of the region" (CCAC, 2006). The institution offers approximately 200 degree programs, including parallel university programs, business, engineering and technology, health-related, and social service programs. There are currently 26,567 credit students enrolled on the 4 main campuses and 6 satellite centers. The average age of the student population is 29.4 years. Additional demographics show that female students are in the majority, numbering 56% of the student body, with male students making up 44% of the population. Only 18% of the students are students of color (CCAC, 2006). CCAC does not maintain statistics on the socioeconomic status of its students though acknowledges that many are of working class or low-income status. There are a variety of support programs for students, including child care, financial aid, remedial courses, tutoring, career planning, career counseling, and health and disability services. Any

student who may be transitioning from public assistance to CCAC is also entitled to additional supports, including transportation assistance, books, equipment, clothing, and fee waivers.

As this project is specifically focused on low-income students, the demographics of this study may not mirror the general CCAC population. Current available statistics (CWPS, 2004; NCCP, 2004c; United States Census Bureau, 2005) reveal that females and members of racial and ethnic minorities are overrepresented in the low-income populace. Thus, the sample for this study reflects that difference.

The 410 participants in this study include 286 females, 124 males; the average age is 26.5 years. The majority, 298 students, are European American; 94 are African American, with the remaining 17 representing other racial and ethnic minorities. Most, 80%, have experienced poverty, with nearly 40% reporting an experience of persistent poverty.

6.2 PROCEDURES

Students were recruited for the research study by the investigator in randomly selected college courses throughout the CCAC system. Faculty within the college were contacted through random selection and asked for permission to visit their classrooms to administer and collect the research measures. All instructions were given by the investigator for the sake of consistency. Self-selecting students within those courses who choose to participate in this research project were asked to complete a series of surveys and a demographic questionnaire. No identifying information was obtained. A response rate of 95% was noted.

6.3 MEASURES

In selecting measures, careful consideration was given to the extended age of community college students (e.g. young and middle-aged adults as opposed to adolescents and young adults), and their socioeconomic and minority statuses. Many measures that are normed for traditional European American middle-class college students who are living away from home at four year colleges or universities were ruled out due to the disparity in the two populations. Further, the logistics and practicality of having students complete the measures was also taken into account due to the lower reading level of some community college students and the maximum time it was assessed they could attend to this task. Finally, consideration of appropriate time constraints on the part of the cooperating faculty was taken into account as well.

Demographics. Information was collected on the students' age, race or ethnicity, gender, income level, number of college credits completed, number of semesters in college, self-reported high school and college grade point average (GPA), and parental status. This demographic information includes traditional markers of achievement among poor students (ATD, 2006a; KEYS, 2006; U. S. Department of Labor, 2000) (see Appendix B).

Use of external college supports. An inventory of the number and type of external resources available to CCAC students and being utilized by the study's participants was constructed. These resources include tutoring, financial assistance, remedial courses, personal counseling, career counseling, transportation assistance, and child care. This list is consistent with the supportive services governmental and other programs are currently providing, (ATD, 2006a; KEYS, 2006; U. S. Department of Labor, 2000). Data from this inventory will be important in differentiating and controlling for the role of external college supports in academic success (see Appendix B).

Social supports. Students completed an adapted version (21-items) of the Social Support Index (SSI) (McCubbin, Patterson, & Glynn, 1982). This measure was selected because it is a straightforward, general measure of the social supports in a person's environment. As a considerable portion of the CCAC student body are parents, often young, single mothers, this survey is useful in that it includes several questions related to support available in that regard as well. Other social support measures that were written specifically for college students address topics not relevant to community college students, such as dorm life, being away from home, and social organizations not available at a commuter school. However, the SSI measure asks general questions involving external supports, such as the following, "Is there someone you can count on to help you with cleaning the house? Handling the bills? Taking care of your child(ren)? This questionnaire also monitors emotional supports with questions such as, "Is there someone you can count on to talk with you about things that upset you? Have fun with?" Additionally, it measures extrafamilial support systems, including questions addressing the following: "Are you a member of a religious group? Community group? Support group? School group?" Responses are given on a three-point Likert scale of Yes, Yes, Sometimes, or No. This measure has shown a statistical reliability of .82 (McCubbin et al., 1982). Further, it addresses many of the levels of Bronfenbrenner's (1979) ecological theory for which I am hoping to control. Thus, this measure was utilized as another control of external supports (see Appendix C).

Self-efficacy. The ten-item General Self-Efficacy Scale (GSE) was administered in order to be correlated with the Self-Compassion Scale for statistical purposes to determine external validity. After reviewing multiple measures of self-efficacy, this version, created by Jerusalem and Schwarzer (1992) was selected as it is a widely utilized scale that measures a global view of perceived self-belief that one can perform novel or difficult tasks or cope with adversity in

various domains of human functioning. This scale is designed for the late adolescent-adult population, and has been most utilized to predict adaptation after life changes, including college transitions (Jerusalem & Swarzer, 1992; Pajares, 1996). The GSE has been administered to over 100,000 participants in 27 languages (Schwarzer & Jerusalem, 1995). Sample questions include, "I can always manage to solve difficult problems if I try hard enough," and "I am confident that I could deal effectively with unexpected events." These questions are scored by the participants on a 4-point Likert scale from "Not at all true" to "Exactly true." The responses from the 10 items are tallied to yield a total score. Past research has shown the GSE to be reliable (Schwarzer & Jerusalem, 1995). In samples from 23 nations, Cronbach's alphas ranged from .76 to .90, with most being in the high .80s. Criterion-related validity is documented in numerous correlational studies where positive coefficients were found with favorable emotions, dispositional optimism, and work satisfaction. Negative coefficients were found with depression, anxiety, stress, and health-related problems (Schwarzer & Jerusalem, 1995) (see Appendix D).

Self-compassion. Participants were given the 26-item Self-Compassion Scale (SCS) (Neff, 2003a), which includes the five-item Self-Kindness subscale (e.g., "I try to be understanding and patient toward aspects of my personality I don't like"), the five-item Self-Judgment subscale (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), the four-item Common Humanity subscale (e.g., "I try to see my failings as part of the human condition"), and the four-item Isolation subscale (e.g., "When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world"), the four-item Mindfulness subscale (e.g., "When something painful happens I try to take a balanced view of the situation"), and the four-item Over-Identification subscale (e.g., "When I'm feeling down I tend to obsess and fixate on everything that's wrong."). Responses are given on a five-

point scale from “Almost Never” to “Almost Always.” Mean scores on the six subscales are then summed (after reverse-coding negative items) to create an overall self-compassion score. In past research (Neff, 2003a) the SCS has demonstrated good internal consistency reliability (.92), as well as good test-retest reliability (r =.93). Confirmatory factor analyses also determined that a single higher-order of self-compassion explained the inter-correlations between the six subscales. This has been interpreted by the Neff (2003a) as indicating that self-compassion is best considered a second order trait that leads to greater mindfulness, and more kindness toward the self. As this is a new measure, and has not been utilized with a low-income population, it will be important to understand whether the measurement tool shows similar psychometric properties in this group as well (see Appendix E).

Table 1 represents the statistical results of the measures used with the current low-income community college sample.

Table 1 *Measurement results*

Measure	Mean	Standard Deviation	Reliability
External Supports	1.65	1.92	.79
Social Support Index	21.69	7.48	.88
Self-Efficacy Scale	30.87	4.62	.78
Self-Compassion Scale	3.51	.76	.94

6.4 DATA ANALYSIS

One goal of my study was to describe the sample of students with respect to race, ethnicity, age, gender, income, and parental status. Frequencies and percentages are reported for categorical variables, and means and standard deviations are reported for quantitative variables.

Analyses used to address the research questions involved first investigating relationships among the independent variables: age, gender, race, ethnicity, parental status, income-level, external support utilization, social supports, and self-compassion, and the dependent variable: academic success, as indicated by self-reported GPA. Then, I conducted correlational analyses, analyses of variance, and cross-tabulations to determine relationships and differences among the independent variables and among the independent variables and the dependent variables.

Third, an exploratory factor analysis was completed on the 26 items of the Self-Compassion Scale to further evaluate the construct validity of this measurement tool with low-income populations, as this will be the first time this measure will be utilized on this subset of the population.

Finally, multiple regressions were conducted to test the theory of self-compassion as a mediator. Baron and Kenny (1986) and Holmbeck (1997) describe four conditions which should be met for a variable to be recognized as having a mediating effect: a) the predictor (income) must be significantly associated with the hypothesized mediator (self-compassion); b) the predictor (income) must be significantly associated with the dependent variable (academic success); c) the mediator (self-compassion) is strongly associated with the dependent variable (academic success); and, d) the impact of the predictor (income), on the dependent variable (academic success) is less after controlling for the mediator (self-compassion).

These prerequisites were analyzed with a series of multiple regression analyses, a strategy that is similar to a path analysis. The analysis was sequenced as follows:

a) The income → self-compassion path was examined in the first regression after controlling for covariates (age, race, ethnicity, gender, parental status, social supports, college supports).

b) The income → academic success path was assessed second, after controlling for covariates.

c) The self-compassion → academic success path was considered next, after controlling for self-efficacy.

d) Income and self-compassion were used as predictors in the final test, with academic success as the dependent variable. In this final analysis Baron and Kenny (1986) recommend simultaneous entry rather than hierarchical entry so that the effect of self-compassion on academic success is examined after income is controlled and the effect of income on academic success is examined after self-compassion is controlled.

Thus, the degree of change in regression coefficients is an indicator of the power of the mediator (self-compassion) in affecting academic achievement in low-income students.

The Sobel Test (Sobel, 1986) was also used to confirm the effect of mediation, when applicable. This statistical test determines whether a variable significantly carries the influence of the independent variable to the dependent variable, and is preferable to Baron and Kenny's determination (Muller, Judd, & Yzerbyt, 2005; Shrout & Bolger, 2002).

7.0 RESULTS

7.1 DESCRIPTIVE STATISTICS

The first step of my analyses was to describe the sample of students with respect to race, ethnicity, age, gender, income, parental status, and academic success. The sample of 410 students reveals that they demographically reflect the general population of community college students. Academically, a range of students are represented, from the new student to those who have taken credits beyond which they may need to obtain a degree. The demographics are broken down in the following tables:

Table 2 *Demographics of Continuous Variables*

Variable	Mean	Standard Deviation	Range
Age	26.51	10.03	18-61
Semesters at CCAC	3.88	2.83	1-20
Credits Completed	36	24.76	3-150
Overall GPA	3.12	.59	.5-4.0
HS GPA	2.65	.79	0-4.
Age Became Parent	19.65	4.51	12-35

Note: $N = 410$.

Female students represented the majority in the sample, consistent with the college's statistics, as seen in Table 3.

Table 3 *Statistics by Gender*

Gender	Participants	Percentage
Male	124	30.2%
Female	286	69.8%

The majority of students were European American, as seen in Table 4. The largest minority group was African American students. Due to the negligible percentage of other races and ethnicities represented in the sample, the others were eliminated from calculations involving race.

Table 4 *Statistics by Race and Ethnicity*

Race or Ethnicity	Participants	Percentage
African American	94	22.9%
American Indian or Alaska Native	3	.7%
Asian	5	1.2%
European American	298	72.7%
Hispanic or Latino	2	.5%
Biracial	7	1.7%

Income level was calculated by asking respondents to indicate their combined monthly income as well as the number of people in their household. It was measured as a continuous variable, though sorted by the federal guidelines for income (U.S. Census Bureau, 2006) for the purposes of this calculation (see Table 5).

Table 5 *Income Distribution*

Household Income	Participants	Percentage
Public Assistance eligible	100	24.4%
Low-Income	223	54.4%
Middle-Income	82	20 %

The following results in Table 6 show income distributions according to monthly income, household size, and income ratio per individual.

Table 6 *Income Statistics*

	Mean	Standard Deviation	Range
Monthly Income	2184.32	1101.93	200-6000
Household Size	3.65	.66	1-10
Income per Individual	667.33	362.81	75-2700

Nearly 40% of the students in this sample come from a background of persistent poverty, as seen in Table 7. These students are those who identified attending a school district documented as having a majority (over 50%) of economically disadvantaged students, and had received free or reduced lunch during their childhood. In addition, they are still on public

assistance or in a low-income category today. Students in the sample who met each of these criteria were coded as having experienced persistent poverty. Based on the significant role that persistent poverty plays in the lives of students, it is important to track this subsample in particular (Brooks-Gunn et al., 1997; Duncan & Brooks-Gunn, 1997, NCCP, 2004a, 2004b) (see Table 7).

Table 7 *Statistics Regarding Rate of Persistent Poverty*

Persistent Poverty	Participants	Percentage
Yes	162	39.5%
No	248	60.5%

Although the majority of students in this sample entered community college after receiving a high school diploma, more than 11% are nontraditional students in the sense that they did not graduate from high school but completed a graduate equivalency (GED) degree instead. These students may be at higher risk for academic difficulties given their lack of success in a traditional academic environment in the past (see Table 8).

Table 8 *Statistics Regarding Pre-College Status*

Pre-College Status	Participants	Percentage
High School Graduate	359	87.6%
Obtained GED	46	11.2%

One third of the community college students in this sample are parents, a statistic that is unique to community colleges and reinforces the unique needs of this set of learners compared to traditional university students (see Table 9).

Table 9 *Statistics on Parent Status*

Parent Status	Number	Percentage
No	274	66.8%
Yes	136	33.2%

Generally community college students appear to make more academic gains in college than they did in high school, though it is very difficult to compare these numbers due to the many high schools represented and the various grading policies and differences in academic rigor of different school districts (see Table 10).

Table 10 *Comparison of Low-Income Students High School and College Self-Reported GPAs*

Academic Performance	Mean	Standard Deviation	Range
Overall College GPA	3.15	.59	1.0-4.0
Overall HS GPA	2.64	.82	0- 4.0

7.2 RELATIONSHIPS AMONG DEMOGRAPHIC VARIABLES AND OUTCOME VARIABLES

Relationships among demographic variables and outcome variables were analyzed next. These calculations were done so that the appropriate variables could be controlled as necessary, in later calculations.

7.2.1 Intercorrelations Among Independent Variables and Dependent Variables

All study variables were inter-correlated to determine what associations were obtained between the independent variables: age, gender, race, ethnicity, parent status, income-level, external support utilization, social supports, and self-compassion, and between the independent variables and the dependent variable: academic success, as indicated by self-reported GPA. Number of credits completed, number of semesters attended, high school status, and age the student became a parent were not significantly correlated with any other variable. Table 9 presents the other correlations.

Table 11 *Inter-Correlations Between Factors*

Measure	Age	Gender	Race	Parent	Income	GPA	CSup	SSup	S-C
Age	1.00	---	---	---	---	---	---	---	---
Gender	.14*	1.00	---	---	---	---	---	---	---
Race	-.27**	-.07	1.00	---	---	---	---	---	---
Parent	.67**	.24**	-.35**	1.00	---	---	---	---	---
Income	-.20**	-.11	.26**	-.35**	1.00	---	---	---	---

GPA	.29**	.10	.15**	.27**	-.18*	1.00	---	---	---
College Supports	.26**	.15**	-.30**	.36**	-.38**	.04	1.00	---	---
Social Supports	-.23**	-.30	-.15**	-.18**	.12*	-.08	-.19**	1.00	---
S-Comp	.31**	.03	-.12*	.22**	-.37**	.23**	.25**	-.12*	1.00

Note*: N* = 393. Gender is coded 0 = females and 1 = males. Race is coded 0 = African American and 1 = European American. ***p* < *.01, * p* < *.05.*

7.2.2 Cross-tabulations Among Variables

Cross-tabulations were conducted to better understand the interrelationships among some of the test variables relevant to this study. To improve my understanding of the role of persistent poverty in this sample, a cross-tabulation which looked at current household income and historical socioeconomic status was completed. Only six individuals who grew up in poverty now report a middle class income. Almost all of those raised in a middle socioeconomic class, 76 of 82, have remained in that income bracket. Seventy four of those who grew up on public assistance continued to require cash assistance from the federal government; 81 who grew up in persistent poverty have moved beyond this need, though they moved from welfare to the working poor. Of those in the low-income category as children, 142 have remained there, 26 are now on public assistance. Consistent with research by NCCP (2004a), it appears that it is indeed difficult to traverse the divide between socioeconomic classes. The majority of those who no longer require public assistance move only to the working poor status of low-income earners (see Table 12).

Table 12 *Household Income * Persistent Poverty Cross-tabulation*

		Persistent Poverty		
		no	yes	Total
Household	Public asst	26	74	100
Income	Low	142	81	223
	Middle	76	6	82
Total		244	161	405

Another important question relevant to this study concerns the association between income and GPA. Curiously, in this sample there is a negative correlation between income and GPA, with lower-income students achieving at a higher level. A statistically significant negative correlation between GPA and income is identified (r = .18*, p < .05), as seen in Table 11, indicating that the highest GPAs are statistically associated with lowest incomes in this sample. This is not consistent with most literature (Autor & Katz, 1999; Axinn et al., 1997; Bailey et al., 2005; Corcoran, 2001; Hanson et al., 1997; .Teachman et al., 1997). Table 13 depicts this distribution.

Table 13 *Overall College GPA * Income Level Cross-tabulation*

Household Income	Mean GPA	N	Std. Deviation
Public asst	3.16	90	.67
Low	3.15	194	.55
Middle	2.99	69	.62
Total	3.12	353	.59

7.3 RELIABILITY ANALYSIS OF THE SELF-COMPASSION SCALE

Next, a series of measures were performed assess the reliability and validity of the Self-Compassion Scale were performed.

Before proceeding with a factor analysis of the Self-Compassion Scale (SCS), a reliability analysis of the scales' 26 items was conducted to determine the test's reliability. Results revealed a Cronbach's alpha of .94, indicating very high internal consistency. Cronbach (1951) discussed reliability as a process used by a test developer to determine the degree to which all items are measuring the same construct.

7.4 EXPLORATORY FACTORY ANALYSIS OF THE SELF-COMPASSION SCALE

Given the critical importance of answering the first research question, about the psychometric properties of the SCS with regard to a low-income student sample, the next level of validation involved completing an exploratory factor analysis (EFA) on the Self-Compassion Scale relative to its usefulness in a low-income student sample. A factor analysis, a statistical tool useful in identifying how many different underlying concepts are measured by this scale, is relevant to understanding the construct validity of the SCS in a low-income population. An exploratory factor analysis is designed to describe interrelationships among variables, reducing the overall complexity of the data. This involves determining how many factors exist, as well as the pattern of the factor loadings. It determines whether the scores on the test measure what the test is supposed to be measuring by addressing whether or not the factors are correlated. Factor analysis

assumes that the measured variables are linear groupings of some underlying foundation factors (Kline, 1994).

7.4.1 Description of the Self-Compassion Scale

Neff's (2003a) SCS consists of 26 stimulus items designed to measure various aspects of self-compassion., measured on a 5 point Lickert-type scale, with 1 measuring a response of "almost never" to 5 measuring a response of "almost always". Neff identifies 6 subscales within the survey: self-kindness, and its' opposite, self-judgment; mindfulness, and its' converse, over-identification, and common humanity and its' extreme, isolation. Positive traits associated with self-kindness, mindfulness, and common humanity are positively worded and randomly placed throughout the survey. Negative traits, affiliated with self-judgment, over-identification, and isolation are negatively worded and reverse-coded. They are also randomly placed throughout the survey. Self-kindness and self-judgment each has 5 items, and the other factors have 4 items each.

7.4.2 Findings

To obtain valid results, it is important to have an adequate sample size. Tabachnick and Fidell (1996) advise having $n = 300$ as a minimum standard; Stevens (1996) advises a minimum ratio of 5 participants per variable. Thus, the current sample of $n = 410$, a ratio of 16:1, is well within the accepted range to ensure valid results.

A principal component analysis was completed. Then, as correlations were expected, the factor analysis was done using an oblique Direct Oblimin rotation, as it is the most efficient way to reach simple structure (Henson, Capraro, & Capraro, 2001; Kline, 1994). The factor extraction method was followed by a scree test; a correlation matrix was also used.

In the original development of the SCS, six distinct factors were recognized: self-kindness (SK), self-judgment (SJ), common humanity (CH), isolation (I), mindfulness (M), and over-identification (OI). The measure's author noted that "a six factor model was found to fit the data well" in her original analysis, (Neff, 2003a, p. 239). However, my findings did not support the author's factor solution. Rather, the results of my EFA pattern matrix indicated at most two factors, those positively worded, representing the traits of self-kindness, common humanity, and mindfulness, and those negatively worded items which indicated self-judgment, isolation, and over-identification, which had been reverse-coded.

This shared variance between the factors reduced the interpretability, as factors are determined by identifying variables with which they share the most variance. Each variable was significantly correlated with the other. The individual factors were not distinct enough to separate themselves out. In effect, they are two sides of the same coin. The component correlation showed r =.56. This was confirmed by re-running the factor analysis and looking at the variables as one factor. As only one component was extracted this time, no rotation occurred (see Table 14).

Table 14 *One Factor Solution*

SCS Item (*reverse coded)	Component	Cumulative % of Variance
SC1-Disapproval and judgmental of my flaws*	.73	41.76

SC2-Obsess and fixate on everything wrong*	.77	52.11
SC3-See difficulties as part of life everyone goes through	.53	56.35
SC4- My inadequacies make me feel separate*	.67	59.93
SC5-Loving toward self when in emotional pain	.55	63.16
SC6- When fail at something consumed by inadequacy*	.68	66.14
SC7- When down remind self a lot of people feel like this	.55	68.95
SC8- Tough on self when times are difficult*	.66	71.61
SC9- Keeps emotions in balance when upset	.60	74.05
SC10- Remind self feelings of inadequacy are shared by most	.63	76.24
SC11- Intolerant and impatient towards parts of self*	.57	78.39
SC12- Give self caring and tenderness I need	.66	80.44
SC13- Feel most people are happier than I am*	.66	82.39
SC14- Take balanced view of painful situation	.70	84.21
SC15- Try to see failings as part of human condition	.60	85.96
SC16- Get down on aspects of self I don't like*	.72	87.64
SC17- Keep things in perspective when failing at something	.65	89.20
SC18- Feel others must have an easier time of it*	.68	90.72
SC19- Kind to self when experiencing suffering	.66	92.17
SC20- Carried away with feelings when upset*	.65	93.50
SC21- Cold-hearted toward self when suffering*	.68	94.80
SC22- Approach feelings with curiosity and openness	.70	95.99
SC23- Tolerant of own flaws and inadequacies	.54	97.12
SC24- Blow painful incidents out of proportion*	.60	98.16

SC25- Feel alone in my failure*	.66	99.10
SC26- Understanding and patient toward my personality	.64	100.00

7.4.3 Limitations

It is difficult to determine whether there is a methodological or conceptual problem with the scale. If the factors loaded on construct issues due to their similarity it is quite possible that it is accurately measuring self-compassion, and all of the factors are interrelated. However, a methodological concern is recognized in the wording of the stimuli. The positive traits (self-kindness, common humanity, and mindfulness) are worded positively and the negative traits (self-judgment, isolation, and over-identification) are worded negatively. The reverse-coded items make up only the latter group, rather than a random sampling of the measurement items.

7.4.4 Correlation with the General Self-Efficacy Scale

As a way of validating the scale further, I examined the correlation between the SCS and a self-efficacy measure, the 10-item General Self-Efficacy Scale (GSE) by Jerusalem and Schwarzer (1995), which was administered to this sample at the same time. Self-efficacy is another self-construct with some similarity to self-compassion (Neff, 2003b). This survey measures a global view of a person's perceived self-belief that one can perform novel or difficult tasks or cope with adversity in various domains of human functioning. In my analysis, there was a positive

correlation ($r = .46$, $p < .01$). In the social sciences, a correlation of this magnitude is considered to have a medium to large effect size (Cohen & Cohen, 1983).

7.4.5 Adjusted scoring of the SCS

The decision was made to utilize the SCS as a general measure of self-compassion. However, it was determined that the scoring of the scale should be altered to reflect the above findings. The original scoring method advised by the author, summing the means of the 6 subscales, was not utilized due to lack of confirmation on the subscales, and instead, this measure was scored by using a composite score.

7.5 MULTIPLE REGRESSIONS

To answer the remaining research questions, multiple regressions were conducted to determine the relationships among the variables (Aiken & West, 1991). Several theories were tested to this end. The second research question asks if a person's level of self-compassion differs based on demographic variations. This is explored further by analyzing the income→self-compassion pathway. The third research question, which asks whether there is a difference in the academic success of community college students based on income, can be further analyzed by looking at the income→ academic achievement path. The final research question, "Do internal resource, specifically self-compassion, contribute to the prediction of academic success, after taking

demographics and external resources into account?" is the main purpose of the multiple regressions, and tests the hypothesis of self-compassion as a mediator between income and academic achievement.

Power calculation software indicates that 103 participants are needed to achieve the following specifications: an alpha of .05, a desired power of .80, a medium effect size, and a total of seven predictor variables. A critical *F* is ($F(7, 95) = 2.11$). Thus, this sample is well within the desired range.

Finally, additional regressions were completed on subsamples within the group to explore the unique qualities of segments of this sample, including specific races, income groups, and ages. The requirements for significance for regressions involving fewer predictor variables are adjusted as follows: six variables, $n = 98$, ($F(6, 91) = 2.19$); five variables, $n = 92$, ($F(5, 86) = 2.32$); four variables, $n = 85$, ($F(4, 80) = 2.99$); three variables, $n = 77$, ($F(3, 73) = 2.73$; two variables, $n = 68$, ($F(2,65) = 3.14$).

7.5.1 Multiple Regression Involving the Entire Sample

Multiple regressions were calculated from the entire participant pool ($n = 410$) to determine if I might predict participants' academic achievement, via self-reported overall GPA, based on their income and level of self-compassion, and to determine whether self-compassion may be a mediator in this regard. Significant regression equations were found in two of my three analyses.

In the income→-self-compassion path, the data were analyzed using income first as the regressor, controlling for age, race, parent status, external college supports, and social supports. The other covariate, gender was nonsignificant. A significant regression equation was found

($F(6,395) = 30.75$, $p < .001$) indicating that income was a significant independent predictor of self-compassion in the overall sample.

The income→academic achievement path was analyzed next. Income again was the regressor, and this time academic achievement was the dependent variable, controlling for age, race, parental status, external college supports, and social supports. These findings reveal that the income→academic achievement path is not a significant one ($F(6,348) = .87$, $p > .05$). Income does not statistically predict GPA in this sample. Thus income does not make a unique contribution separate from the other independent variables in this pathway.

The self-compassion→academic achievement path was analyzed next, controlling for the same covariates. Results of this analysis show a significant regression equation ($F(6, 348) = 7.08$, $p < .01$).

As all of the conditions at each pathway were not met (income→academic achievement was not significant), self-compassion cannot act as a mediator in this process. Thus, the fourth possible regression, in which income and self-compassion were both simultaneously used as predictors was not completed.

Low-income community college students, particularly older, African American students who are parents and have few social supports, appear to have a very high level of self-compassion, and this does affect their academic performance in a positive way. However, there is not a direct correlation between their level of income and this process in the overall sample (see Figure 4 and Table 15)

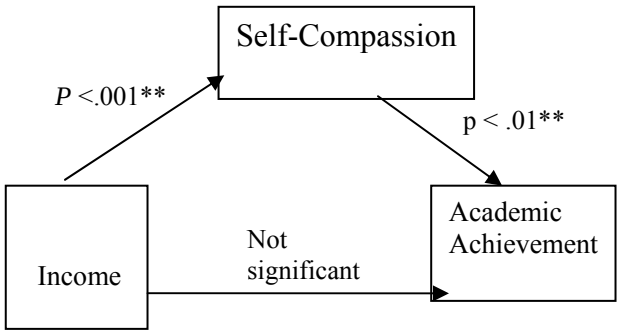

Figure 4 *Illustration of Multiple Regression of the Entire Sample*

Table 15 *Regression Table on Entire Sample*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Age	.02	.01	.22***
	Race	-.09	.09	-.20***
	Parental Status	.39	.10	.16*
	External College Support	.06	.01	.05
	External Social Support	-.08	.02	-.17**
	Income	-.20	.05	-.17***
	F	30.75***		
	R^2	.28***		
Path 2	**Income on GPA**			
	Age	.01	.00	.22**
	Race	.07	.07	.05
	Parental Status	.16	.09	.13

	External College Support	-.02	.02	-.05
	External Social Support	-.00	.00	-.01
	Income	-.16	.00	.05
	F	.89		
	R^2	.12		
Path 3	**Self-Compassion on GPA**			
	Age	.01	.00	.22**
	Race	-.05	.03	-.11*
	Parental Status	.16	.09	.13
	External College Support	-.03	.02	-.09
	External Social Support	-.00	-.00	-.01
	Self-Compassion	.12	.05	.16**
	F	7.08**		
	R^2	.12**		

Note: *$p < .05$, **$p < .01$, ***$p < .001$

7.5.2 Multiple Regression of European American Students

The participant pool was broken down to further analyze the role of race due to the significant correlation between income and race. The subgroup being examined at this time are specifically the European American students ($n = 298$).

In the income→-self-compassion path, the regression equation was not statistically significant ($F(5, 284) = 3.65$ $p > .05$), after controlling for covariates of age, race, parent status, social supports, and external college supports.

The income→academic achievement path was analyzed next. Income again was the regressor, and this time academic achievement is the dependent variable. Covariates are again controlled. The income→academic achievement path is not a significant one ($F(5, 252) = 1.68$, $p > .05$). Income does not statistically predict GPA in this sample.

The self-compassion→academic achievement path was analyzed next. Results of this analysis show a significant regression equation was found ($F(5, 252) = 5.81$, $p < .01$).

It appears that though there is a role for self-compassion in the academic achievement of White low-income community college students, the association is not related to income. Fewer external supports and having children appear to contribute to self-compassion and increased GPA in this subgroup (see Figure 5 and Table 16).

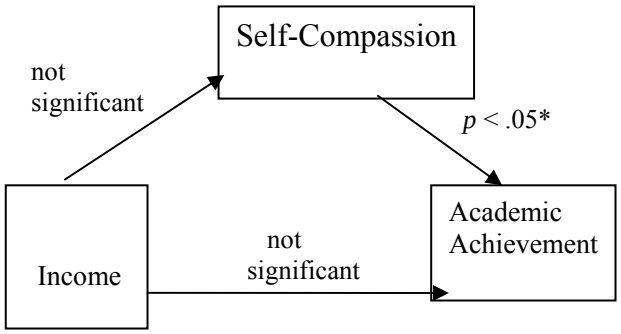

Figure 5 *Illustration of Multiple Regression of European American Students*

Table 16. *Regression Table on European American Students*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Age	.02	.01	.27***
	Parental Status	.17	.12	.11
	External College Support	.04	.02	.10
	External Social Support	.01	.01	.13
	Income	.00	,00	-.11
	F	3.65		
	R^2	.14		
Path 2	**Income on GPA**			
	Age	.00	.01	.06
	Parental Status	.28	.12	.20*
	External College Support	-.05	.02	-.17**
	External Social Support	.02	.01	.16
	Income	-.10	.06	-.11
	F	1.68		
	R^2	.12		
Path 3	**Self-Compassion on GPA**			
	Age	.01	.01	.10
	Parental Status	.28	.12	.20*
	External College Support	-.06	.02	-.17**
	External Social Support	.01	.01	.04

Self-Compassion	.15	.06	.18**
F	5.81*		
R^2	.10*		

Note: $N = 286$; *$p < .05$, **$p < .01$, ***$p < .001$

7.5.3 Multiple Regression of African American Students

The next series of regressions looked at the unique contributions of African American students (*n* = 94) due to the prior mentioned significant correlation between race and income, as well as prior research findings suggesting the unique experience of the African American community relevant to poverty and educational attainment (Haveman, et al., 1997; Holzer, 2005; Mayer, 1997; NCCP, 2004b, 2004c; Timpane & Hauptman, 2004; U. S. Department of Labor, 2005).

In the income→-self-compassion path, the data were analyzed using income first as the predictor, controlling for age, parent status, social supports, and external college supports. Gender was nonsignificant. A significant regression equation was found ($F(5, 86) = 8.52$, $p < .05$). Increased age, positive parent status, lack of social supports in their immediate environment, and use of external college supports also factored into the role of low-income in creating increased self-compassion in the African American sample.

The income→academic achievement path was analyzed next. Income again was the regressor, and this time academic achievement is the dependent variable. The covariates remained the same. These findings reveal that the income→academic achievement path is not a significant one ($F(5, 78) = 3.78$, $p > .05$). Income does not statistically predict GPA in this

sample. Thus income does not make a unique contribution separate from the other independent variables in this pathway.

The self-compassion→academic achievement path was analyzed next, controlling again for the previously identified covariates. Results of this analysis show a significant regression equation was found ($F(4, 81) = 7.56$, $p < .01$ There was a significant F change when adding self-compassion to the regression equation, thus a higher level of self-compassion significantly predicts academic achievement in the African American community college population. In this sample, parent status, fewer social supports, and increased use of external college supports were statistically significant. Figure 6 and Table 17 illustrate these findings.

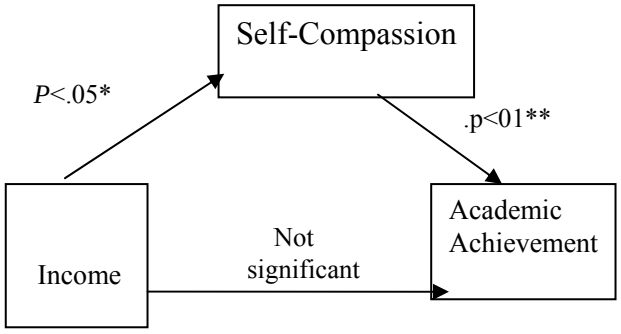

Figure 6 *Illustration of Multiple Regression of African American Students*

Table 17 *Regression Table on African American Students*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Age	.01	.01	.13
	Parental Status	.51	.18	.33**
	External College Support	.08	.03	.26*

	External Social Support	-.01	.01	-.13*
	Income	.00	.00	-.18*
	F	8.56*		
	R^2	.13*		
Path 2	**Income on GPA**			
	Age	.02	.01	.37**
	Parental Status	.13	.16	.10
	External College Support	.05	.03	.20
	External Social Support	-.01	.01	-.09
	Income	.22	.11	.22
	F	3.78		
	R^2	.20		
Path 3	**Self-Compassion on GPA**			
	Age	.04	.05	.06
	Parental Status	.28	.18	.21*
	External College Support	.05	.02	.15*
	External Social Support	-.01	.01	-.20*
	Self-Compassion	.15	.05	.17**
	F	7.56**		
	R^2	.12**		

Note: $N = 94$; *p < .05, **p < .01, ***p < .001

7.5.4 Multiple Regression of Students Who Have Experienced Persistent Poverty

Next, I made the determination to look at students who have lived in persistent poverty, as prior research shows that this subgroup has the opportunity to suffer for an extended period of time, and the outcomes overall are less hopeful (Duncan & Brooks-Gunn, 1997; Burtless & Smeeding, 2001; Corcoran, 2001). As previously noted, persistent poverty for the purposes of this study means that these students have received free or reduced lunch through some or all of their elementary and/or secondary school years, and are still considered low-income or public assistance recipients today. Additionally, this subgroup of the sample attended school districts in southwestern Pennsylvania which enroll a majority of economically disadvantaged students. Those in this subsample attended school districts that reported a range of 55.9-96.9% economically disadvantaged students. This unique population (n = 155) is the core of this study.

In the income→self-compassion path for this subgroup, the data were analyzed using income as the predictor, controlling for age, race, parent status, social supports, and external college supports. The other covariate gender was nonsignificant. A significant regression equation was found (F (6,149) = 26.80, $p < .001$). There was a significant F change of .000 when adding income to the regression equation, thus a lower income significantly predicts self-compassion; even between the students in the lower socioeconomic range.

The income→academic achievement path was analyzed next. Income again was the regressor, and this time academic achievement is the dependent variable; the above covariates were again controlled. These findings reveal that the income→academic achievement path is a significant one in this subsample (F (6,138) = 10.15, $p < .01$). Lower Income does statistically predict higher GPA in this sample. Thus income does make a unique contribution separate from the other independent variables in this pathway.

The self-compassion→academic achievement path was analyzed next, analyzing for the covariates of age, race, parent status, external college and social supports. Results of this analysis show a significant regression equation was found ($F(6, 138) = 7.91$, $p < .01$). Thus a higher level of self-compassion significantly predicts academic achievement in students who have experienced persistent poverty.

As all of the conditions at each pathway were met, self-compassion and income were simultaneously entered into a fourth regression equation to test the possibility of self-compassion as a mediator, controlling for the covariates of age, race, parent status, external college and social supports. This regression is also significant, ($F(7, 137) = 6.42$, $p < .001$). This statistical significance indicates that self-compassion is indeed a mediating variable between income and academic achievement in this subgroup of students who have experienced persistent poverty. According to Baron and Kenny (1986), the intensity in which there is a change in regression coefficients is an indicator of the power of the mediator (self-compassion) in affecting academic achievement in low-income students. A significant F change of .000 is reported, indicating a large effect.

The Sobel Test (Sobel, 1986) was also used to confirm the effect of mediation. This statistical test determines whether a variable significantly carries the influence of the independent variable to the dependent variable, by examining the regression coefficient for the relationship between the independent variable and the mediator (income→self-compassion) after accounting for standard error, and the regression coefficient for the relationship between the mediator and the dependent variable (self-compassion→academic achievement), again after accounting for standard error. This may be preferable to Baron and Kenny's determination (Muller et al., 2005). Findings with regard to this calculation reveal ($t_{137} = 2.92$, $p = .0035$). Thus, self-compassion

appears to truly be a mediating variable between income and academic achievement with this group of students.

MacKinnon, Krull, and Lockwood (2000) explain that, "it is typically assumed that statistical adjustment for a third variable will reduce the magnitude of the relationship between the independent and dependent variables. In the mediational context, the relationship is reduced because the mediator explains part or all of the relationship because it is the causal path between the independent variable and the dependent variable" (p. 174). This reduction is noted in the above equations. If the magnitude of the relationship had increased with the addition of a third variable, this would indicate suppression (McKinnon et al., 2000). A confounding variable would have reversed the direction between the mediator (self-compassion) and the independent variable (income) (McKinnon et al., 2000).

However, self-compassion here may more accurately be termed a moderating mediator. Muller et al. (2005) describe a moderating mediator as the introduction of another variable (persistent poverty) in A (income), which contributes to A having an effect on B (self-compassion), and B having an effect on C (academic achievement). In other words, "if the moderator is an individual difference variable, then it would mean that the mediating process that intervenes between the (independent variable) and the outcome is different for people who differ on the individual difference" (p. 854).

Although I cannot establish causal links definitively, there appears to be evidence that this mediation pattern is more plausible than the others. Figure 7 and Table 18 illustrate this.

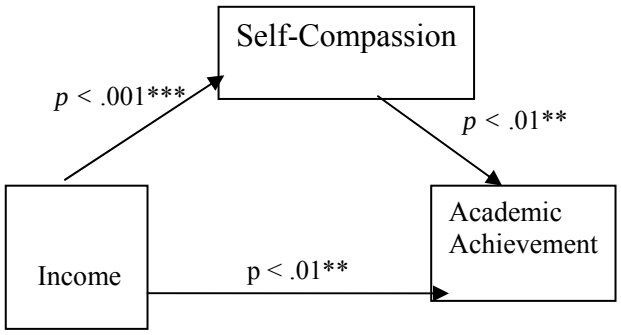

Figure 7 *Illustration of Multiple Regression of Students Experiencing Persistent Poverty*

Table 18 *Regression Table on Students Experiencing Persistent Poverty*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Age	.02	.01	.25***
	Race	-.07	.03	-.13**
	Parental Status	.20	.10	.13*
	External College Support	.00	.04	.03
	External Social Support	-.08	.18	-.20***
	Income	-.23	.06	-.18***
	F	26.80***		
	R^2	.28***		
Path 2	**Income on GPA**			
	Age	.02	.02	.27**
	Race	-.02	.01	-.37**
	Parental Status	.04	.03	.13

	External College Support	.03	.03	.11
	External Social Support	-.01	.02	-.10
	Income	-.02	.00	-.26**
	F	10.15**		
	R^2	.19**		
Path 3	**Self-Compassion on GPA**			
	Age	.01	.01	.17*
	Race	.05	.03	.12
	Parental Status	.15	.10	.13
	External College Support	-.00	.01	-.09
	External Social Support	-.01	.02	-.02
	Self-Compassion	.15	.05	.17**
	F	7.90**		
	R^2	.18*		
Path 4	**Income + SC on GPA**			
	Age	.01	.01	.13
	Race	-.05	.03	-.12
	Parental Status	.19	.10	.16*
	External College Support	-.02	.02	-.08
	External Social Support	-.01	.01	-.04
	Self-Compassion	.13	.05	.17**
	Income	.00	.00	-.17**
	F	6.42***		

R^2		.35***

Note: $N = 155$; *$p < .05$, **$p < .01$, ***$p < .001$

7.5.5 Multiple Regression of Students Who Have Not Experienced Poverty

Next, I examined the percentage of my sample that had not experienced poverty ($n = 82$), to see if they might experience this process differently. None of the pathways in this portion of the group were significant. Curiously, the role of self-compassion does not appear to be significant in students who have never experienced poverty. Income appears to create different experiences with regard to self-compassion and academic success.

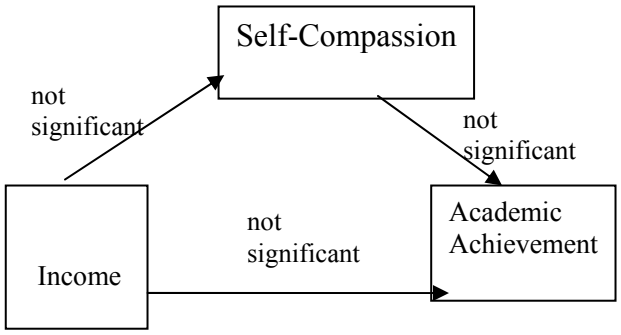

Figure 8 *Illustration of Multiple Regression of Students Who Have Not Experienced Poverty*

Table 19 *Regression Table of Students Who Have Not Experienced Poverty*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Age	.01	.01	.13

	Race	-.13	.16	-.07
	Parental Status	.39	.18	.25*
	External College Support	.07	.03	.22*
	External Social Support	-.01	.01	-.13
	Income	.00	.00	-.16
	F	3.06		
	R^2	.03		
Path 2	**Income on GPA**			
	Age	.02	.04	.36**
	Race	.00	.01	.04
	Parental Status	.04	.15	.03
	External College Support	.04	.03	.14
	External Social Support	-.01	.01	-.06
	Income	.00	.00	.18
	F	2.73		
	R^2	.02		
Path 3	**Self-Compassion on GPA**			
	Age	.02	.01	.40**
	Race	.05	.03	.12
	Parental Status	.04	.15	.03
	External College Support	.03	.03	.12
	External Social Support	-.00	.01	-.04
	Self-Compassion	.06	.10	.08

F	.39
R^2	.01

Note: $N = 76$; *$p < .05$, **$p < .01$

7.5.6 Multiple Regression Based on Age

As age, particularly as it applies to older, nontraditional students, appears to be another significant factor in the above regressions, and is consistent with the belief that those living longer will have more opportunity to experience suffering over time, both in terms of Bronfenbrenner's (1979) chronosystem theory and Buddhist psychology (diSilva, 1986), it was decided to look at the conceptual framework in terms of age. As the mean age of students in this study was 26.51, those over 26 were included in this next analysis ($n = 136$).

None of the pathways in this portion of the group were significant either. It appears that advanced age alone is not significant but must be viewed in conjunction with over significant variables, such as lower income and African American heritage.

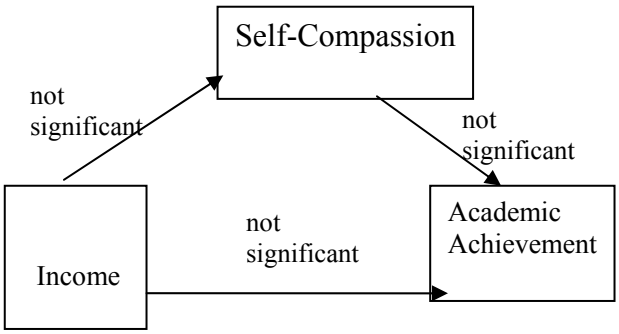

Figure 9 *Illustration on Multiple Regression Based on Age*

Table 20 *Regression Table of Students Based on Age*

Model	Variables	B	SE B	β
Path 1	**Income on Self-Compassion**			
	Race	-.01	.00	-.07
	Parental Status	.02	.08	.10
	External College Support	.05	.02	.16*
	External Social Support	.01	.01	.02
	Income	-.05	.09	-.04
	F	.77		
	R^2	.10		
Path 2	**Income on GPA**			
	Race	.02	.01	.26**
	Parental Status	.04	.03	.13
	External College Support	.04	.03	.15
	External Social Support	-.01	.01	-.06
	Income	.17	.10	.13
	F	2.59		
	R^2	.04		
Path 3	**Self-Compassion on GPA**			
	Race	-.02	.01	-.23*
	Parental Status	.02	.08	.06
	External College Support	.03	.03	.12
	External Social Support	-.01	.01	-.05

Self-Compassion	.01	.09	.01
F	2.17		
R^2	.03		

Note: $N = 136$; $^{*}p < .05$, $^{**}p < .01$

8.0 DISCUSSION

8.1 ADDRESSING THE RESEARCH QUESTIONS

8.1.1 Analyzing the Psychometric Properties of the SCS in Relation to Low-Income Community College Students

As previously identified, the factor loadings on the SCS scale did not support the author's factor solution when administered to a sample of low-income community college students. It is difficult to determine whether there is a methodological or conceptual problem with the scale. If the factors loaded on construct issues due to their similarity it is quite possible that it is accurately measuring self-compassion, as all of the factors are interrelated. Inter-correlations between the 26 factors show that each factor is positively correlated with the other. Traits that identify positive self-care, such as, "When something upsets me I try to keep my emotions in balance" (SCS 9, mindfulness subscale), and, "When times are really difficult, I tend to be tough on myself" (SCS 8, self-judgment subscale, reverse-coded) (r =.47) may be interpreted similarly by the sample, and reflective of self-compassion generally, though participants were less able to distinguish individual subthemes.

However, a methodological concern is recognized in the wording of the stimuli. The positive self-attributes (self-kindness, common humanity, and mindfulness) are worded

positively and the negative self-attributes (self-judgment, isolation, and over-identification) are worded negatively. The reverse-coded items make up only the latter group, rather than a random sampling of the measurement items. This design is problematic, and makes it difficult to definitively answer this question. Could this design have influenced the respondents' selections? It is worth addressing.

As the outcomes of the study are only as good as the methods and measurement tools, there may remain some question as to the accuracy of the results of my study. However, based on the findings, and the SCS's statistically significant correlation with a related positive self-attribute, the GSE, it appears that the findings generally reflect the stated purpose of the scale, though I am unable to specifically measure the unique traits that may specifically comprise self-compassion.

Conceptually, self-compassion is viewed by this sample of low-income community college students as generally being kind to oneself, being mindful in their daily activities, and recognizing the common humanity within our society. They are able to clearly recognize these as positive self-attitudes, and endorse this mindset to being self-judgmental, isolating, and over-identifying with the negative things in life.

8.1.2 Self-Compassion as it Relates to the Unique Demographics of the Sample

As community college students statistically tend to be older, poorer, nontraditional students, and students of color, it is worth analyzing self-compassion in relation to demographics. The responses to the SCS showed some clear differences between groups. Low-income students, particularly older, African American students who are parents, and have lived at least part of

their childhood in impoverished circumstances with limited social supports have statistically significant levels of self-compassion, as compared to their European American, childless, middle class peers, of more traditional college age.

These findings are consistent with the tenets of Buddhist psychology and its focus on suffering, as it especially identifies with those who are burdened in life. Suffering is related to poverty in that it creates feelings of frustration and failure, unmet needs, delays, a lack of progress on life's path, as well as feelings of discrimination, exploitation, shame, fear, and lack of power due to consistently difficult living conditions (Narayan & Walton, 2000). Racial discrimination may add to these feelings of powerless and alienation (Bauman & Bauman, 2001; Hopps, Tourse, & Christian, 2002). Those who are found in the lower social strata of society, such as the sample utilized in this research, are ideal subjects for Buddhist psychology, as they experience more setbacks and disappointments than the average person. However, rather than just acknowledge this suffering, Buddhist psychology focuses on how suffering might be transformed into a life plan that minimizes suffering by addressing self-attitudes and behaviors (diSilva, 1986, 2005; Gonaratna, 1968; Kalupahana, 1987; Krishnamurti, 2006). The students in this study developed such a life plan by returning to higher education, with a focus on career development and economic self-sufficiency. It is thus a philosophy of self-transformation and self-improvement through personal effort.

Those who experience life's hardships, such as poverty-related stressors, have the greatest opportunity for transformation through self-reflection. When we are comfortable in our life circumstances we have little reason to contemplate change. Whereas, when there is suffering you become more aware of who you are, why you are here, and where you are going (diSilva, 1986; Gonaratna, 1968; Kalupahana, 1987; Kongtrul, 2005). Increased insight allows for

enhanced awareness of possibilities, and the opportunity to create change. Those who sought out additional education have come to this realization. There is less anger, isolation, and judgment of the self, and more self-compassion (Gonaratna, 1968; Kalupahana, 1987; Neff, 2003b).

The self-reflective process of self-compassion allows one to understanding one's own suffering, and taking a nonjudgmental attitude toward one's inadequacies and failures. Thus, community college students in this study are less concerned with failure, and more with their desire for change. Further, one's life experience is framed in view of the common human experience, so the potential for "failure" is less pesonal, and the opportunity for change, not only for oneself, but for one's family or larger community is primary (Neff, 2003b). Thus, those who experience suffering may develop internal resources with which to reframe life's hardships and propel themselves toward the future (Kongrul, 2005). An internal sense of control appears clearly associated with positive outcomes. Those who believe they have control over their lives are more likely to overcome adversity (Egeland, Carson, & Scoufe, 1993; Luthar & Ziglar, 1991; O'Connor, 1997; Seligman, 1992; Tiet, Bird, & Davies, 1998; Werner & Smith, 1982, 1992, 2001).

This view is supported by the results of this research, in that those to whom life has been most harsh scored highest in levels of self-compassion. It may be interpreted that the process of transforming suffering into a more positive result did occur in the predicted way: a) an increased awareness that life and people are imperfect, "thus I am not damaged or incapable"; b) this increased wisdom leads to redirection of one's life, and the believe that, "I am worthy and capable" ; and, c) an increased effort to make change.

8.1.3 Is There a Difference in the Academic Success of Community College Students Based on Income Level?

Parent income has been shown to be positively correlated with a child's academic success (Astin, 1992; Autor & Katz, 1999; Axinn et al., 1997; Bailey et al., 2005; Blank & Schmidt, 2002; Brooks-Gunn et al., 1997; Burtless & Smeeding, 2001; Conger et al., 1997; Corcoran, 2001, Corcoran & Adams, 1997; DiCesare, 1992; Fine, 1991; Finn & Rock, 1997; Follins, 2005; Freeman, 2001; Hanson et al., 1997; Hauser & Sweeney, 1997; Haverman et al., 1997; Hernandez, 1997, Holzer, 2005; Loury, 2001; Mayer, 1997; Morgan-Gardner, 2004; NCCP, 2004b; Peters & Mullins, 1997; Teachman et al., 1997; Timpane & Hauptman, 2004). My research findings are not consistent with these outcomes.

A review of the results of this study shows that the lowest income students statistically have the greatest academic success. These findings are quite the opposite of what is found in most of the literature on academic achievement, which focuses solely on income and academic achievement. Why might this sample of community college students' academic achievements defy some other research findings? Longitudinal data currently does not exist that can conclusively make statements about poverty's far-reaching effects (Duncan & Brooks-Gunn, 1997; Hauser & Sweeney, 1997; Karoly, 2001). However, we do know that there are particular patterns which are seen as adolescents transition to adulthood. Social class variables of one's family of origin are linked to one's chosen pathway (Osgood, Ruth, Eccles, Jacobs, & Barber,

2005). Those living in poverty, in particular, do not focus as much on an orderly transition from youth to adulthood. This is true of the participants in this study.

People of lower socioeconomic status have unique life experiences that are not shared by others in the population. Often they do not transition to adulthood in the typical way that other high school students do. The established indicators of young adulthood are completing one's education, beginning a career, leaving home, marrying, and becoming a parent (Shanahan, Porfeli, Mortimer, & Erickson, 2005). Emerging adulthood is a sequence of decisions that create possibilities or constraints. Community college students, often older than traditional college students, frequently do not enter adulthood, or college, in the typical way. Low-income community college students, particularly older, African American students who are parents, and have lived at least part of their childhood in impoverished circumstances with limited social supports, enter college later in life, after a period of adversity, and a desire to change their life circumstances for themselves, their children, and even their community (Boardman & Roberts, 2000; Brodsky, 1999; Todd & Worell, 2001). Thus they are more motivated to achieve success.

Similar research has also found that socioeconomic status alone may not be the sole predictor of academic success or failure (Axinn et al., 1997; Clark, 1983; Furstenberg, Cook, Eccles, Elder, & Sameroff, 1999; Hanson et al., 1997; Hauser et al, 1997; Henderson, 1996; Lareau, 2003; Radke-Yarrow & Brown, 1993). Other studies that have specifically focused on high risk college students have consistently addressed the necessity of inner resources. Fortson's (1997) research on African American male college students showed that retention programs which focused on self-concept were most successful. Gerardi (1996) conducted a study to understand the factors which influence community college graduation rates, and also found that students' beliefs about their abilities were primary. Other researchers studying academic

resiliency in low-income samples report similar results (Asteline & Gore, 2005; Astin, 1992; Bailey et al., 2005; CWPS, 2004; DiCesare, 1992; Harris, 1992; Sheldon et al., 2004; Timpane & Hauptman, 2004; Urdan & Maehr, 1995).

Resilience can also be thought of as competence in the face of significant challenges to academic achievement (Borman & Overman, 2004; Driscoll, 2006; Gottfried, Fleming, & Gottfried, 2001; Henderson, 1996; Masten and Coatsworth, 1998; Stewart, Jo, Murray, Fitzgerald, Neil, Fear, et al., 1998). Resilient students appear to have a higher motivation to learn due to a belief that one's efforts will pay off. Several recent studies regarding academic resiliency have further highlighted the role of internal strengths in academic success (Aseltine & Gore, 2005; Capella & Weinstein, 2001; Connell, Spencer, & Aber, 1994; DiCesare, 1992, Gerardi, 2005, Gordon, 1995; Gordon Rouse, 2001; Morgan-Gardner, 2005; Zimmerman, Bandura, & Martinez-Pons, 1992).

Resiliency research offers the opportunity to explain why undergraduates succeed despite adversity. Focusing on alterable student behaviors that have been shown to be related to academic success provide the additional benefit of identifying potential alterations to current interventions that may promote academic resiliency among students who are considered "high risk."

8.1.4 Self-Compassion's Role in the Prediction of Academic Success of Low-Income Community College Students

I have found that self-compassion is clearly seen in lower-income populations. I have also found that those with the lowest incomes have the greatest academic achievement in this sample of

low-income community college students. How might self-compassion mediate milestones such as academic success in college?

Milestones are more than external markers. Other, more individualistic criteria, should be considered, due to social changes that have delayed or altered the emergence into adulthood. "Psychological adulthood" as depicted by cognitive and emotional maturity is now replacing the traditional markers of adulthood (Shanahan et al., 2005). Accepting responsibility for oneself, as well as financial independence, are increasingly recognized as markers of young adults as opposed to an extended adolescence. Furstenberg et al (1999) identified specific traits which lead to a positive adjustment in adulthood as follows: academic competency, personal contentment, interpersonal skills, social involvement, and the ability to avoid problem behaviors; "Personal agency combined with social opportunity is the formula for success" (p. 215). One's accumulated talents, supports, and hopes in conjunction with challenges and opportunities will help define post high school life (Furstenberg et al., 1999). Poorer members of society, often members of ethnically and racially diverse groups, face the biggest challenges in this regard (Mollenkopf, Waters, Holdaway, & Kasinitz, 2005; Mouw, 2005). However, the life positions of low-income individuals are not always detrimental. Vulnerability to undesirable life events may have more to do with coping strategies and personality characteristics than simple economic realities (McEwen, 1998; McLeod & Kessler, 1990; Stewart, Jo, Murray, Fitzgerald, Neil, Fear, et al.,1998). Mizell's (1999) research at the Joint Center for Poverty Research reinforces the challenges of lower-income students in a post-high school environment, but also focuses on their potential. Mizell's findings show that poverty does reduce future earnings potential. However, individual characteristics, including motivation, aspirations, and self-esteem, in combination with advanced educational attainment may diminish the negative effects of poverty.

My research findings also appear to suggest that intrinsic traits do make a positive contribution to achievement despite adversity. Until now, self-compassion was not a construct that has been tied directly to academic resilience, but now appears to have merit. After a period of adversity and self-reflection may come self-compassion. This is followed by positive action, such as is seen in the community college students in this group who sought out needed college supports, such as tutoring or child care, and had greater academic success than they did in their younger years. They report a sense of self-compassion with regard to their life experience, which is transferred to their educational performance, allowing them to have consistent academic success at a post-high school level. A sense of feeling that negative life events served some larger purpose appears to be underlying their perseverance, as seen by the responses on the Self-Compassion Scale, particularly for low-income students and students of color, where there is a very strong statistical correlation between demographics and self-compassion.

The African American culture specifically has historically persevered throughout a long history of adversity, and current life experiences tend to fit into this distinct pattern of beliefs and practices (Burt, & Halpin, 1998; Connell et al., 1995; Jarrett, 1995; Littleton, 2001; Utsey, Bolden, Lanier, & Williams, 2007). Items on the Self-Compassion Scale that were routinely endorsed by this segment of the sample include, “I see my failings as part of the human condition,” ”When things go badly for me, I see the difficulties as part of life that everyone goes through,” “When I’m down, I remind myself that there are lots of other people in the world feeling like I am,” and, “When something painful happens, I try to keep a balanced view of the situation.” These findings are consistent with studies done on coping skills within the African American community (Barbarin, 1993; Burt, & Halpin, 1998; Graham, 1994; Staples, Schwalbe, & Gecas, 1984). Thus, the role of culture may add to the complexity of this issue.

Self-compassion focuses on the emotional attitude individuals take toward themselves when confronted with an experience of suffering or failure. Thus, those who experience suffering may develop internal resources with which to reframe life's hardships and propel themselves toward the future. It is the assertion of this research that self-compassion may be reflected in educational achievement for this reason. Earlier research has shown that emotions about the self play a role in goal direction, academic achievement, and persistence (Huther, 2006; Linnenbrink & Pintrich, 2002; Leary, 2003, 2004; Leary et al., 2005; Neff et al., 2005; Turner et al., 2002).

My results reinforce this view, though go beyond some of the current research findings. The study by Neff et al (2005), for example, examined the correlation between self-compassion and academic achievement goals among middle-class college students. Whereas, Neff et al's findings revealed that self-compassion was not directly tied to competence as defined by grade point average, but only appeared to underlie academic success via motivational patterns, my results with low-income community college students, indicate that lower fear of failure and greater perceived expertise in learning situations, did indeed translate into success in performance as well. Poor community college students, unlike traditional college students, may develop greater self-compassion through the continual experience of life stressors and related suffering. Self-compassion may transform, not only into motivation and persistence, but mastery of academic subjects at the community college level, allowing students to have success in their academic performance as well. Leary and his colleagues (2005) further support this argument, suggesting that self-compassion may provide protection from negative emotions and contribute positively to cognitive growth. Joorman's (2005) research also suggests that stressful events may ultimately enhance performance through creativity. Intelligence, one of the defining characteristics of human beings, is an inherent ability to respond to the world with awareness,

knowledge, learning and insight (Almaas, 2006). As students work through defenses and conflicts surrounding them, they may become more functional. Those in this study demonstrate this skill, as I have found that low-income students who have experienced poverty over a period of time have developed higher levels of self-compassion. This self-compassion appears to mediate their academic success, as this sample of students is indeed more academically successful at a community college level than their peers.

The results of this study on self-compassion and academic achievement are encouraging and may prove to be useful in guiding more students toward educational attainment, making further exploration of this topic all the more important.

8.2 LIMITATIONS

A limitation in this study may be the focus on self-reports. Both income level and overall college GPA were reported by the students. Although I have no reason to believe participants engaged in false reporting, it is always possible that one may convey this very personal information in an inflated way.

Measuring an esoteric topic such as self-compassion is also intractable in that respondents may not be aware enough of their own inner feelings to accurately identify them on a self-report measure. In depth interviews may be a more certain way of getting at such emotions. While quantitative measures are good at identifying themes, qualitative measures may be more successful at getting at the inner workings of these concepts.

Although the findings in this research study did not show an interaction effect, poverty and the African American community are unfortunately intertwined. Thus, it may be impossible to definitively conclude if the historical experience of African Americans or the experience of poverty creates the experience of suffering which contributes to the development of self-compassion. Poverty and race, may not be additive, but interlocking, interactive, and relational factors.

Cognitive functioning was not considered in this research study. Evaluating the intellectual performance of students could be an important part of understanding academic success.

Finally, it is important to note that causality cannot be inferred in a cross-sectional design.

8.3 FUTURE RESEARCH

A qualitative study which is able to tease out more specific details from this segment of the population with regard to whether they believe feelings related to self-compassion underlie their academic success would be crucial to have more direct answers to this question.

Further validation of the Self-Compassion Scale, perhaps through a confirmatory factor analysis, or the development of an alternate tool which might be utilized in similar research, is another consideration.

Longitudinal research which looks at poverty over time is an excellent way to determine information about the long term impact of growing up poor.

8.4 CONCLUSIONS

Human beings possess a great potential of mind, and a desire for happiness and meaning in life. Sometimes, however, we lose focus and become distracted by the inevitable pain and suffering that enters our lives, as society's preconditioned settings and habits are powerful (Kongtrul, 2005). A person caught up in a poverty mentality may end up feeling undeserving, helpless, and insecure. Craving what we do not have and wanting to be what we are not are basic human emotions. For some, this is the endpoint.

For other individuals, however, this suffering is a transformational experience. The classic story of Buddha illustrates that it was the realization of suffering that inspired his search for change. When we face difficulties, it forces us to uncover inner resources we may never have known. We become more self-reflective as we tune into the experience of suffering, over time depersonalizing it, and ultimately liberating us from negative emotions and guiding our life in a new direction. This openness to possibility generates humility, contentment, and self-compassion (Gonaratna, 1968). Self-compassion allows us to accept life fully, assessing the beginning, middle, and end of our journey, and recognizing our potential (Kongtrul, 2005). An awakened mind creates an awakened heart (Huther, 2006). A new path is realized as we let go of feelings of fear and vulnerability and gain confidence. Self-compassion changes our mental attitude as we lose our self-pity and self-absorption.

If we do not recognize our true determination we cannot act. However, when we become clear on our goals we can support that intent with the way we live our lives and direct our minds

(Kongtrul, 2005). This inspiration comes from within, not from the outside world. We are transformed from the inside out. We begin to feel more resilient and take action toward our goals. However, this achievement is not about ego. The thought of benefiting others and contributing to the larger human community clears away suffering, and propel us toward our goals. For the sample in this study, the way to achieve these goals is through higher education. No longer distracted by the hassles of daily life, they can put their intelligence to better use. Having a clear purpose in life, they can support that aim by focusing their minds, relying on intelligence and creativity in resolving negative circumstances, rather than being predictable in relating to life's stressors. Without life challenges they would miss the opportunity to develop their intellect in the same way.

Sufficient time and suffering are needed for this transformation to occur (Kongtrul, 2005). Thus, older students who have had an extensive period of poverty-related stressors, and lack of social supports, are most open to self-compassion and associated educational attainment, so that they might contribute to a better world for themselves, their children, and others like themselves. Taking their lives into their own hands, they are realizing great possibilities, returning to higher education renewed and successful, with an enriched perspective of the human condition

This study has identified a subset of low-income community college students who have experienced a persistent period of poverty, in which self-compassion is indeed a factor in mediating their academic success, as they move beyond their current life circumstances to a new life. As poor, single parents with lower levels of educational attainment, who are unemployed or underemployed, are most at risk for perpetuating the cycle of poverty according to statistics (Axinn et al.., 1997; Corcoran & Adams, 1997; McLanahan, 1997), this is an important finding.

Encouraging the development of inner resources, particularly self-compassion, has the potential to propel more poor adults toward a community college education and ultimately improve economic self-sufficiency. A next step may be to develop programs for poor students focusing on this construct.

APPENDIX A

DEFINITIONS

a) Low-income: For a family of four, the United States government defines the poverty threshold as a yearly income of below $20,000 (U.S. Census Bureau, 2006). Low-income families are defined as families whose yearly income is less than twice the poverty level ($40,000), the minimum necessary to meet basic needs according to economists. For the purposes of this study, students in the sample will primarily fall into this income category.

b) Persistent poverty: Those who have grown up in low-income households for the at least 4 years during their childhoods are included in this category.

c) Academic achievement: Although this term can be interpreted in various ways, it implies having success in school. In this paper, academic achievement will be measured by self-reported GPA.

d) High risk students: Students who have a history of poor academic performance or failure, or come from a communtiy or ethnic group whose students tend to do less well in school are termed “high risk.” or “at risk” students.

e) Community College: Community colleges are two year colleges which often do not have admission criteria, thus accepting all high school graduates, or those with general equivalency diplomas (GEDs), often "high risk" students. The focus of these educational institutions is on aiding students in securing Associates degress or vocational certificates. They may or may not transfer to 4-year colleges.

f) Resilience: This construct in a relatively new term in developmental psychology and implies achieving success despite adversity in one's life.

g) External resources: Supports from familial or extrafamilal systems, including schools, government, churches, and community groups are included in this terminology.

h) Internal resources:This term is used in this study to address inner strengths of an individual. Self-esteem, self-efficacy, a positive sense of identity, and self-compassion are all considered internal resources.

i) Self-efficacy: This construct is a popular one in the resiliency literature and indicates a belief in oneself to be able to carry out the necessary course of action to complete a desired task.

j) Self-compassion: This concept is derived from Buddist philosophy and implies feelings of nonjudgmentalness towards oneself, as opposed to feelings of harshness or criticism. Self-compassionate individuals understand their own inadequacies in the context of the larger human experience, resulting in forgiveness and kindness towards the self.

k) Self-reflection: A process by which individuals evaluate their own experiences and thought processes.

APPENDIX B

Please complete this form so the researcher might know a little bit more about the persons participating in the study. Please DO NOT put your name or any other identifying information on these pages.

1. Age_____

2. **Gender** M_____ F_____

3. Race or ethnicity African American_____ American Indian or Alaska Native_____

Asian_____ Native Hawaiian or Other Pacific Islander_____

White_____ Hispanic or Latino_____

4. Are you a parent? Yes_____ No_____

If so, at what age did you first become a parent?_____

5. How many people (adults and children) live in your household? _____

6. What was the <u>combined</u> income that was received last month in your household from all jobs, including temporary or odd jobs as well as regular jobs, and any other income sources like TANF, child support, etc.? (Please circle one).

$100	$1100	$2100	
$200	$1200	$2200	
$300	$1300	$2300	
$400	$1400	$2400	
$500	$1500	$2500	
$600	$1600	$2600	
$700	$1700	$2700	
$800	$1800	$2800	
$900	$1900	$2900	
$1000	$2000	$3000	More than $3000 _____

7. Does any of the above income come from TANF ("welfare")? Yes_____ No _____

8. How many semesters have you been in college? _____

9. How many credits have you completed? _____

10. What is your overall college GPA? _____

11. Which of the following best describes you?

High School Graduate_____ Completed GED_____

12. To the best of your memory, what was your average high school grade?

A____ B____ C____ D____ F____

13. Which high school did you attend last? _____

14. Have you ever received free or reduced lunch? Yes_____ No _____

15. Please check any of the CCAC services on this list that you use to help you have success in college.

Transportation voucher or assistance_____
Child care assistance_____
Personal counseling_____
Vouchers for books/supplies _____
Financial aid _____
Clothing allowance_____
Health and disability services_____
Tutoring_____
Work study_____
Career counseling_____
DVS classes (080, 090's)_____

Thank you!

APPENDIX C

Social Support Index (SSI)

McCubbin and Patterson (1982)

These questions are about how you solve problems and whom you turn to for help.

1. Is there someone who you can count on to help you with. . .

	Yes (02)	Yes, Sometimes (01)	No (00)
a. food shopping?			
b. planning and cooking with meals?			
c. cleaning the house?			
d. handling the bills?			
e. deciding how the money should be spent?			
f. taking care of your child(ren)? (if applicable)			
g. disciplining your child(ren)? (if applicable)			

2. Is there someone who you can count on to. . .

	Yes (02)	Yes, Sometimes (01)	No (00)
a. comfort you when you are sad?			
b. take care of you when you are sick?			
c. have fun with?			
d. talk with you about things that upset you?			
e. talk with you about your private feelings?			
f. tell you that you are okay the way you are?			

	Yes (01)	No (00)
3. In the last two weeks, have you contacted a member of your family who does not live with you by phone, letter, or in person?		

4. Do you have agreements with friends about exchanging babysitting or exchanging other services like cleaning or repairing?		
5. Are you a member of the following. . .		
a. A religious group, ex: a church, mosque, prayer group, Bible study?		
b. A community group, such as a neighborhood council, tenant association, or neighborhood watch?		
c. A support group?		
d. A school group, such as PTA, school council or parent organization?		
e. Head Start or another early childhood parent group?		
f. Do you belong to other groups?		

APPENDIX D

The General Self-Efficacy Scale (GSE)

Matthias Jerusalem & Ralf Schwarzer, 1993, Revised 2000

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

1	I can always manage to solve difficult problems if I try hard enough.
2	If someone opposes me, I can find the means and ways to get what I want.
3	It is easy for me to stick to my aims and accomplish my goals.
4	I am confident that I could deal efficiently with unexpected events.
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.
6	I can solve most problems if I invest the necessary effort.
7	I can remain calm when facing difficulties because I can rely on my coping abilities.
8	When I am confronted with a problem, I can usually find several solutions.
9	If I am in trouble, I can usually think of a solution.
10	I can usually handle whatever comes my way.

APPENDIX E

Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

1. I'm disapproving and judgmental about my own flaws and inadequacies.
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
5. I try to be loving towards myself when I'm feeling emotional pain.
6. When I fail at something important to me I become consumed by feelings of inadequacy.
7. When I'm down, I remind myself that there are lots of other people in the world feeling like I am.
8. When times are really difficult, I tend to be tough on myself.
9. When something upsets me I try to keep my emotions in balance.
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
11. I'm intolerant and impatient towards those aspects of my personality I don't like.
12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
14. When something painful happens I try to take a balanced view of the situation.
15. I try to see my failings as part of the human condition
16. When I see aspects of myself that I don't like, I get down on myself.
17. When I fail at something important to me I try to keep things in perspective.
18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.

19. I’m kind to myself when I’m experiencing suffering.
20. When something upsets me I get carried away with my feelings.
21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
22. When I'm feeling down I try to approach my feelings with curiosity and openness.
23. I’m tolerant of my own flaws and inadequacies.
24. When something painful happens I tend to blow the incident out of proportion.
25. When I fail at something that's important to me, I tend to feel alone in my failure.
26. I try to be understanding and patient towards those aspects of my personality I don't like.

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