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APPALACHIAN HIGH SCHOOL STUDENTS' POSSIBLE SELVES

AS A MEDIATOR OF CONTINUING THEIR EDUCATION

by

Erica Chenoweth

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

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in

Psychology

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ABSTRACT

Appalachian High School Students' Possible Selves

As a Mediator of Continuing Their Education

by

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Utah State University, 2005

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Department: Psychology

The Appalachian region has long been regarded as an economically

disadvantaged area, with a lower percentage of individuals pursuing higher education

than in the nation as a whole. Improving the educational status of residents of Appalachia

may foster some economic transition in the region, shifting the employment focus from

an unskilled labor emphasis to more professional and career opportunities. Better

understanding of the influences in the decision processes of Appalachian students is

needed in order to design and implement intervention programs to increase enrollment in

higher education. The concept of *possible selves* is introduced as a way to examine

individuals' goals and beliefs about themselves in future contexts. Other factors

(academic preparation, family, and culture) influencing the decision regarding college

attendance were considered and evaluated in relation to possible selves. A model was

developed to examine the influences of academic preparation, family, and culture on

Appalachian students' educational goals and aspirations, as they are mediated by possible

selves. It was hypothesized that the *mediated influences model* sufficiently predicts students' plans for college attendance. Statistical analysis and a revision of the original model were conducted, and results indicate that the model was adequately supported. Interpretations for these results were offered, and implications and limitations of the study were discussed.

(94 pages)

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On a more personal note, thank you to my husband, for enduring the hardships of these many years so that I could achieve my goal. You have sacrificed a great deal and I want you to know that I recognize and appreciate it. Thanks to our parents, Dora and Steve, and Dave and Arlene, for your support and encouragement throughout. Finally, to our baby, Taylor, thanks for adding a whole new meaning and joy to our lives.

<div style="text-align: right">Erica Chenoweth</div>

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CHAPTER I

STATEMENT OF THE PROBLEM

Participation in higher education has implied benefits for individuals and the community. Communities especially benefit when their members obtain education and return to the community, setting up businesses, providing opportunities, and mentoring others (DeYoung, 2002). The Appalachian region in the United States has historically been an economically deprived area. Unemployment rates are generally high, as is dependence on federal and state supplemental income (Obermiller & Maloney, 2002). Further perpetuating the economic stress, rates of enrollment in institutions of higher education are well below the national norm—around 30% versus the national rate of 60% (Spohn, Crowther, & Lykins, 1992). Colleges and universities in the area have sought to increase enrollment rates, but the majority of students who wish to attend college do not enroll within the first year after graduation (Spohn et al.).

It is relatively unclear how young adults make this decision and what factors are associated with the choice to enroll in an institution of higher education. Although investigators have been able to identify some influences in this decision, there is little insight into how such factors affect students' thoughts regarding future academic pursuits or career aspirations. Reasons for not going to college are many, but some research findings suggest that individuals who choose not to go to college do not see themselves as college material (Spohn et al., 1992). Markus and Nurius (1986) introduced the term *possible selves* to describe one's visualizations of the type of person one may become in the future. These conceptual entities, or possible selves, influence the path that one takes

in life. Students have ideas of who they will be in the future; often these ideas lead to goals, and those goals lead to the necessary steps to achieving those goals.

Research that has been conducted with Appalachian youth suggests that youth do not go college for financial reasons and influences from family and peers (Chenoweth & Galliher, 2004; Spohn et al., 1992). However, the *college material* hypothesis (i.e., students do not see themselves as college material) has not been adequately investigated and research is lacking in this area. The sense of being college material, defined by the concept of possible selves, may influence whether or not Appalachian youth go to college. Appalachian students have some concept of who they may be in the future, and this concept leads to formulations of goals. It is suggested that students who have academically achieving possible selves do better in school and go on to college. Those who have professional possible selves are also likely to achieve in school and enroll in college. Students who have more negative possible selves, or less academically oriented possible selves, are not as likely to go on to college.

The purpose of this study was to examine the role of possible selves in the academic and career aspirations of Appalachian students through the development and test of a latent model. It is argued that the model should have three characteristics. First, the multiple environmental influences of family, school, peers, and culture impact the development of possible selves. Second, individuals' concepts of their possible selves include both hoped-for selves and feared selves. Third, these possible selves influence whether students go to college through the development of their educational goals and aspirations. The model developed and tested in this study included these three characteristics and is labeled the *Mediated Influences Model*. It integrates what is known

(from prior research) about influences of educational goals of adolescents and applies them specifically to Appalachian youth.

CHAPTER II

REVIEW OF THE LITERATURE

The Appalachian region has been repeatedly identified as an economically disadvantaged area for many reasons. Family and per capita incomes are significantly lower than those reported for the United States as a whole. Higher unemployment rates and concentration of poverty in the Appalachian region have resulted from job losses in the well-paid mining and manufacturing industries. Subsequently, higher rates of dependency on federal and state supplemental income have followed (Obermiller & Maloney, 2002). In addition, the rates of college attendance in this area are lower than the national average. In the fall of 1991, 80% of high school seniors in Ohio Appalachia stated they wanted to go to college. However, only one third of the same sample was likely to enroll the following fall (Spohn et al., 1992). It seems that a primary factor in lifting this region from its economic woes is increasing college attendance rates and thus improving the employment sector of the area.

In order to understand the factors associated with Appalachian students' college attendance, it is first necessary to review the literature regarding influences on college attendance in general. Several studies have focused on this issue, citing individual, family, and cultural factors as influential in this decision process. In addition, two studies have focused specifically on influential factors for Appalachian students. These studies are discussed in somewhat more detail. Finally, possible selves as a mediator of the relationship between influential factors and educational aspirations of Appalachian youth are discussed. These three components--influential factors, possible selves, and

educational aspirations--form the Mediated Influences Model, explaining the processes involved in the decision to attend college.

Factors Influencing College Attendance

Investigators have studied the factors that influence students in their decisions regarding participation in higher education. Hearn (1984) discussed the complexity of influences upon the college decision and concluded that the relationships among these influences are poorly understood. Primarily, "socioeconomic background, high school experiences, and family background" influenced a student's decision (Thomas, 1998, p. 2). Upon review of the literature, three areas of influence have been consistently implicated in this decision: academic preparation, family, and ethnic and cultural variables.

Academic Preparation

Academic achievement and preparation are highly correlated with college attendance. College preparatory curriculum, higher grade point averages (GPAs), higher achievement/standardized test scores, and advanced educational goals are predictive of college attendance (Chenoweth & Galliher, 2004; Ganderton & Santos, 1995; King, 1996; Otto, 1986; Stage & Hossler, 1989; Thomas, 1998). The relationships among these variables seem obvious. Students who experience more academic success and feel more confident about their academic ability are more likely to plan for advanced educational status. Students who do well academically (higher GPAs and test scores) are more likely to be enrolled in college preparatory classes. High school curricula often determine the

level of academic achievement obtained (Thomas). Therefore, students with higher levels of academic confidence are more likely to be enrolled in college preparatory courses, have higher standardized test scores and GPAs, and are more likely to have educational goals to obtain at least a bachelor's degree.

In a very informative study, King (1996) further delineated the significance of academic preparation in college choice of low-income students. She surveyed 300 students with family incomes under $20,000, in an attempt to understand differences between students who decide to go to college and those who do not. High self-confidence in academics, especially math and science, influenced low-income students to attend college at an equal rate in comparison to their higher income peers. Similarly, advanced educational aspirations and career goals significantly influenced low-income students in pursuit of higher education. Students with college preparatory curriculum and higher GPAs were also more likely to attend college.

Family

Parental and socioeconomic influences have been described as the two most important familial factors related to college attendance. Although students are influenced by a number of factors—parents, siblings, extended family, teachers, neighbors, and peers—parents are the most influential in regard to educational and occupational achievement. Parents influence their children by setting an example, by punishing and rewarding desired goals, by teaching their values, by providing opportunities, and by instilling in their children a sense of who they are, what they can control, and what they can achieve in life (Otto, 1986). More specifically, parents' attained level of education

and parental encouragement/expectations are among the most influential parent factors associated with college plans. Students whose parents attended college are much more likely to attend college themselves (Stage & Hossler, 1989; Thomas, 1998). As Otto explained, "level of schooling is the best single predictor of people's occupational achievements in our society" (p. 232) and parents' occupational status generally predicts the level of occupational status that their children will achieve.

Family income is another major factor influencing the decision to attend college (Stage & Hossler, 1989). Students of higher socioeconomic status (SES) are more likely to enroll in college than their lower SES peers (Thomas, 1998). A family's SES is generally perpetuated by the level of education achieved by the children in the family. In this manner, a family maintains its advantaged or disadvantaged status. A family's SES is determined primarily by the father's occupational status (Otto, 1986), although this trend may be changing as more women continue to enter the workforce and the number of single mother families increases. Families of lower SES may not highly value academic achievement compared to higher SES families. If parents are relatively uneducated, it is likely that they will not know how to encourage or promote higher education, thus making it appear less valuable or available to their children. Such differences become more evident as children progress into high school and beyond. The costs of higher education may also prevent lower SES families from promoting higher education, simply due to their inability to finance college (Otto; Stage & Hossler).

Low-income students demonstrate some unique patterns in the college decision process. King (1996) noted that low-income students are more likely to be female or of minority status and their parents generally have lower educational and occupational

status. Low-income students score an average of 130 points lower on the Scholastic

Aptitude Test (SAT®) than their higher income counterparts. Further, these students are

more likely to choose options other than a four-year college or university in their plans

after high school. Low-income students whose parents were professionals, albeit low-

paying professionals, were more likely to attend college. Additionally, low-income

students who obtained information regarding college from peers, parents, school

counselors, or higher education institutions and those who stated that they could count on

their parents to help them afford college were also more likely to go. Further, those

students who expected to use financial aid, especially in the form of grants, were more

likely to attend college.

In another study, Alexander, Entwisle, and Bedinger (1994) reported that among

three groups of elementary students--middle-class, African American, and low-income

White students--parents' high expectations for the future were stronger predictors for

students' academic achievement for the middle-class students than for either of the other

two groups. Thus, although parents' high expectations are strong academic predictors for

White middle-class children, the connection is not as clear for minority and low-income

students (Yowell, 2000).

Although most investigators have concluded that gender is not directly associated

with college plans, some research findings have indicated that family and environmental

factors impact girls and boys differently, which has resulted in different educational and

occupational aspirations (Carpenter & Fleishman, 1987; Marini & Greenberger, 1978;

both cited in Stage & Hossler, 1989). Stage and Hossler reported results from their study

that suggested "subtle differences in family influence on male and female students'

college-going plans" (p. 301). Both parents' educational achievement, as well as family income, were important factors affecting parents' educational expectations for their children. Father's income was most influential for both girls and boys, and total family income was important for girls only. The number of children in the family already attending college negatively affected the likelihood that parents saved for college, which was a more significant factor for girls. With limited resources, girls were less encouraged than boys to attend college. Boys were less affected in general by the differences in family influences and resources.

Ethnicity and Culture

Some researchers have focused on ethnic and cultural issues and their impact on the college decision process. In a review of the literature, Thomas (1998) concluded that African American and Latino students demonstrate different patterns of college attendance compared to White students because of family and background characteristics such as SES and "the context in which students of different ethnic origins make their decisions about college" (p. 2). Financial aid is especially important for these groups, and it generally improves the accessibility of college (Perna, 2000; Thomas). These students are often uninformed about the availability and process of obtaining financial aid, and many times they lack information regarding the college process in general (Perna; Thomas). Growing numbers of single-parent families, lower levels of education and occupational attainment, and increasing poverty among ethnic and racial minority groups intensify barriers to higher education. Many minority students do not see college as relevant to their lives, and the concept of delayed reinforcement seems strange when

faced with the need for an immediate income (Freeman, 1999; Oliver & Etcheverry, 1987; Thomas). Academic achievement and preparation are highly correlated with college attendance (Chenoweth & Galliher, 2004; Ganderton & Santos, 1995; King, 1996; Otto, 1986; Stage & Hossler, 1989). In addition, high school curricula often determine the level of academic achievement obtained. Fewer minority students are enrolled in college preparatory courses in school, even when they are able to achieve at the same level as their White peers (Thomas).

Perna (2000) found that African Americans, Hispanics, and Whites experience different influences in deciding whether to attend college. For White students, academic ability was most influential in the college decision. For African American and Hispanic students, academic ability was as important as social and cultural factors. Social and cultural influences determine the value placed on a college education and the personal value of attending college is reflected in the educational expectations one has for oneself. Similarly, parents' educational attainment generally reflects upon their educational values, which are demonstrated through their encouragement for their children to attend college. Such encouragement may also be influenced by their knowledge or ability to access information about obtaining a college education. Aspirations for advanced educational degrees were influential for Hispanics and Whites, but not African Americans. Parental encouragement increased the likelihood of college attendance for Whites, but not for the other two groups. Parents' level of educational attainment was more influential for African Americans and Whites than for Hispanics. Peer influences were not important for any group. Steinberg (1996) explained this phenomenon by concluding that peer influences primarily occur in the middle school years.

Despite these differences, academic achievement and success remain important to African American and Latino youth. Several investigators examined the factors associated with the decision to attend college for these minority students. Oliver and Etcheverry (1987) concluded that individual career objectives, availability of financial aid, job availability, contact with individuals working in professional careers, and peer influences were major factors in educational goals for African Americans. Freeman (1999) found that economic expectations influenced the decision-making processes of this group as students consider whether or not to attend college. She found that African American students were much more likely to weigh the financial benefits and the costs of higher education and approached the decision with much skepticism. Thomas (1998) found that African American students who were more likely to attend a four-year college or university had parents with some college education, were enrolled in college preparatory curriculum in high school, fell in the third quartile or higher on standardized tests, and had advanced educational goals. In addition, African American girls have been found to be more likely to go to college than boys (Ganderton & Santos, 1995; Hatch & Mommsen, 1984; Thomas, 1998). In contrast, Latinos attending college are more likely to be from lower-income families, may or may not have parents who attended college, fell in the top two quartiles on standardized tests, were enrolled in college preparatory curriculum, and had advanced educational goals. Research among Latinos indicates that more young men attend college than young women (Perna, 2000; Thomas). Latino cultural influences may provide a possible explanation for this phenomenon. Many Latina women experience pressure to conform to traditional gender roles, especially because

there is strong emphasis on family within the culture. Opportunities and encouragement to obtain higher education may be limited for these women (Thomas).

Appalachian Culture

The cultural landscape of Appalachia likely influences the academic and occupational aspirations of students residing in this area by shaping students' views of themselves. In order to understand the cultural influences of Appalachia, it is important to outline characteristics of the region. Appalachia is the name given to the region in the eastern United States surrounding the Appalachian Mountains. The word "Appalachian" refers either to this geographic region or the culture of the people who reside there. The Appalachian Regional Commission defined the region as including all of West Virginia and parts of 12 other states, stretching along the Appalachian Mountain Range, from New York to Mississippi (see Figure 1). The area is mostly rural, with some metropolitan areas such as Pittsburgh. The region is predominately inhabited by White individuals (93%) although there are people of other various cultures and ethnicities in the area (e.g., Amish, Hispanics, American Indians, and African Americans). Many Appalachians are of Scotch-Irish decent, with generations of ancestors who inhabited the isolated mountainous regions, building a unique culture (Batteau, 1979-1980; Klein, 1995). Some researchers (e.g., Keefe, 1992; Keefe, Reck, & Reck, 1983) have asserted that the culture has developed into an ethnicity. In fact, the city of Cincinnati has adopted "an ordinance prohibiting discrimination in housing, employment, and public accommodations on the basis of race; gender; age; color; religion; disability status; marital status; or ethnic, national, or Appalachian regional origin (see City of Cincinnati, Ordinance No. 66, 1995,
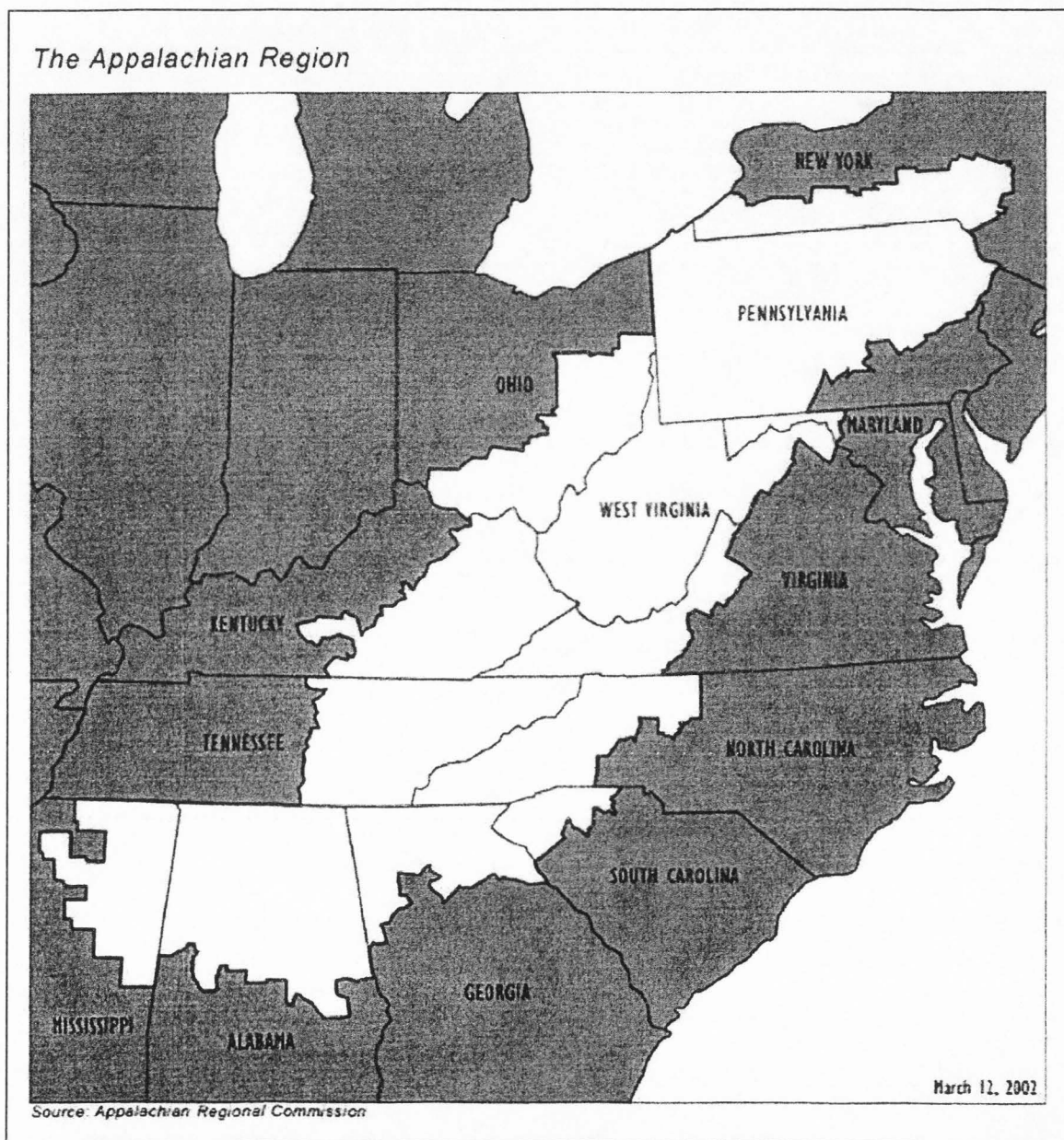
Figure 1. The Appalachian region.

Source: Appalachian Regional Commission (2002; used with permission).

modifying Title IX of the Cincinnati Municipal Code by amending Chapter 914)" (Rural & Appalachian Youth & Families Consortium, 1996, p. 388).

Derogatory descriptions of people from the Appalachian region often perpetuate negative stereotypes and discrimination. Klein (1995) described how such stereotypes might be internalized by the Appalachian people and serve to maintain distance between these individuals and career and educational opportunities. Appalachians are often stereotyped as "hillbillies," destined to be undereducated and often unemployed. Given such a stereotype, families in the region may feel more distant from the general American community, and strive to preserve an isolated life style for fear of rejection. Such isolation only perpetuates the cycle of economic and educational deprivation, exacerbated by this self-fulfilling prophecy. Often, such marginalization is the result of misunderstandings between Appalachian individuals and individuals from the larger American culture (Batteau, 1979-80).

The hillbilly caricature implies that the people of Appalachia are mainly farmers, when, in fact the region became quite industrialized in the early 1900s. Coal mines provided the majority of economic sustenance, especially in West Virginia, until the latter part of the 20th century, when the mines became depleted. Since then, other natural resources have been tapped for financial gain (e.g., timber). However, the residents in the region continue to struggle to find employment opportunities in the blue-collar sector (Lewis, 1993). Although professional careers have gradually increased over the years, the majority of the Appalachian working class remains unskilled or semiskilled (Spohn et al., 1992). The exploitation of natural resources by large companies combined with the large available labor source has resulted in more low-paying job opportunities rather than

improved economic gains. These dynamics are similar to those found in third world

countries (Lohmann, 1990; Robertson & Shoffner, 1989). Indeed Lohmann and others

have referred to Appalachia as "America's Third World."

Appalachian culture is primarily influenced by the interaction of two major

factors: "(a) the social-cultural influences of urban America and (b) the lingering aspects

of rural folk culture" (Rural & Appalachian Youth & Families Consortium, 1996, p. 387).

In the previous literature on Appalachian families, there were three factors that

continually surfaced as characteristics somewhat unique to Appalachian culture: localism,

historicism, and familism (Rural & Appalachian Youth & Families Consortium).

Localism is characterized by a sense of belonging, or being a part of the land.

Appalachian families tend to maintain a commitment to the place in which they live, or

where they grew up. This concept is supported by the fact that a large number of

individuals from the region continue to live in the area, work in the area, and raise

families of their own. Historicism refers to the sense or understanding of one's place in

history, within the family and region where one developed. Such devotion to place and

time is further accentuated by one's sense of family. A strong commitment and reliance

upon family of origin defines the concept of familism. Appalachian people are often in

contact with and influenced by extended family members, such as grandparents, aunts,

uncles, cousins, and other relatives. Especially in more rural areas of Appalachia, family

members, immediate and extended, often share common residence or plots of land,

known as *kinship communities* (Rural & Appalachian Youth & Families Consortium).

In addition, Jones (2002) nicely summarized the values important to Appalachian

people. First, independence and perseverance are admired attributes, and many

Appalachians have been accused of having a stubborn quality related to these characteristics. Hard physical labor is valued, sometimes above education. Being kind to others and effort to not "step on toes" describes the informal way Appalachian people relate to others. They are very loyal to kin and to close friends whom they treat as kin. Humility and modesty describe the Appalachian way of downplaying one's talents and positive qualities. Appalachian people do not appreciate bragging, and make it a point to prevent thinking too highly of themselves. Similarly, there is a reluctance to confront others, because there is a consistent view that it is only God's place to judge others. In Appalachia, it is important to not "shake things up," because things could always get worse.

Finally, one of the most discussed characteristics of Appalachian people in the literature to date is *fatalism*. There is a feeling of powerlessness, or learned helplessness, which has been coined *Appalachian fatalism* (O'Brien, 2001; Obermiller & Maloney, 2002). Many people in the area have suffered through poverty and concluded that things may never get better, so there may be limited motivation to put effort in to trying to improve things to a great extent. This concept or feeling is often passed on, through generations.

To date, only two studies have been conducted regarding the factors influencing the college decisions of Appalachian students. The first study, entitled "Appalachian Access and Success" (hereinafter referred as the AAS study), was published in 1992 by the Ohio Board of Regents (Spohn et al.). The results obtained from this study were similar to those of other studies in which investigators studied educational participation, conducted with various populations of students across the country (e.g., Freeman, 1999;

Hamrick & Stage, 2000; Perna, 2000; Stage & Hossler, 1989; Thomas, 1998). Barriers such as individual, familial, institutional, and regional influences impacted the decisions made by students regarding whether or not to further their education. Chenoweth and Galliher (2004) conducted the second study on factors influencing the college decisions of Appalachian youth, examining the differential impact of individual, family, peer, and school contexts on the college decision for girls versus boys. Results from this study indicated that boys were more influenced by friends and family than girls, possibly as a result of perceived differences in opportunities available for young men and women. Without a college education, young men in Appalachia have more opportunities for lucrative employment than young women (e.g., mining and timber industries). The majority of the girls in the study stated that they planned to go to college, regardless of environmental influences.

Academic preparation and Appalachian students. The AAS investigators reported academic factors were highly associated with Appalachian students' decisions to pursue higher education. These factors included the high school students' academic ability, their hopes and goals for themselves in the future, and their expectations for the future. Low self-esteem was also a factor, as many seniors saw themselves as unable to fit into the college scene, or lacking in intelligence or adequate grades for acceptance and success. High school personnel in Appalachia felt their students were unprepared for college, both academically and in their expectations for college life. Similarly, the most significant predictors found in Chenoweth and Galliher's (2004) study were associated with individual academic factors. Essentially, all measured variables that were reflective of academic preparation and investment were strongly associated with college plans.

Advanced educational goals, college preparatory high school curriculum, self-perception

of adequate preparation for college, higher perceived intelligence, and high school GPA

were all associated with a greater likelihood of college plans for attendance.

Family influences and Appalachian students. Family factors that influence

Appalachian students' college enrollment include the family as a resource provider,

family members as role models, and family as a source of encouragement for higher

education. More specifically, the AAS study findings revealed that level of parental

educational attainment was a factor that influenced (a) whether students could navigate

the application process, and (b) whether they witnessed first-hand the benefits of higher

education. Similarly, siblings' college attendance influenced enrollment, because older

siblings are often role models for their younger brothers and sisters. Low family income

and the family's inability to help finance higher education was another factor. High

school personnel perceived a lack of parental encouragement for students to attend

college. Results obtained from the AAS study indicated that college costs weighed

against the ability to make an immediate income through employment, and many seniors

were uninformed about the availability of financial aid.

Perceived parental support, family income, and siblings' college attendance

comprised the family factors under examination in the Chenoweth and Galliher (2004)

study. Results indicated that Appalachian students did not feel that parental support of

higher education was a factor related to their decisions regarding college attendance, nor

were family income (compared to others) or their siblings' attendance of college.

However, parents' college attendance and their overall attained level of education were

significant predictors for both males and females. Similarly, father's occupation was

influential in determining whether a student (boy or girl) planned to attend college.

Father's education and family social status were more salient predictors of college plans

for boys versus girls.

Appalachian culture. Chenoweth and Galliher (2004) examined Appalachian

cultural influences on college attendance decisions, with mixed results. The majority of

students surveyed in the study reported that they were from Appalachia, so comparisons

between students from Appalachia and other parts of the nation were not possible.

However, the finding that college attendance among extended family members (e.g.,

aunts, uncles) was strongly associated with students' plans for college attendance lends

indirect support to the influence of Appalachian familism on students' educational

aspirations. The AAS investigators also reported some regional factors acting as barriers

to the attainment of higher education. These factors were primarily related to lack of

information available to high school counselors, and as a result, lack of college

information available to students. High school personnel found it difficult to obtain and

maintain access to admission requirements and financial aid information for various

colleges. It is difficult to ascertain whether these barriers resulted from Appalachian

fatalism or simply regional isolation. Better assessment of Appalachian culture is needed

in order for this concept to be examined in relation to college attendance rates.

How do these identified factors affect Appalachian students in the college

decision-making process? It is possible that the influences described alter or form the

way the students view themselves. Many factors that influence students' decisions

regarding higher education directly impact their self-concept, such that some students

may not see themselves as college material. Students' concepts of themselves as college

material have not been directly measured, but one can speculate that some students who want to attend college, but do not enroll, are hindered by concerns that they will not succeed in a college setting. These students may not see themselves as achieving academically in a higher education setting or they may not picture themselves working in a professional career that would require such education. Family and community experiences may not provide these students with role models or examples of academic or professional success. Thus, these students may be unaware of the possibilities that exist in their academic and occupational future. Conversely, students who are aware of their academic abilities may think of themselves as achieving individuals. These students develop goals and aspirations of higher education and higher status occupations. Students with this type of awareness often do see themselves as college material and they aspire to such (Otto, 1986).

Another explanation for low college attendance rates could be low self-esteem reportedly experienced by these students. It is possible that many Appalachian students feel fairly discouraged about their future and become anxious about proving the hillbilly stereotype as correct. They may see themselves as failing in the college setting or simply destined to work a minimum wage factory job. Instead of pursuing higher education and risking failure, they may instead strive to avoid the Appalachian stereotype and reliance on government assistance and immediately obtain employment to generate an income. In this respect, Appalachian fatalism may be to blame for underachievement and resignation to circumstances.

Possible Selves

Explanations for low college attendance in the Appalachian region can be further

investigated using a possible selves approach. Possible selves describes a concept studied

and developed by Markus and Nurius (1986). Possible selves are representations of an

individual's ideas regarding what he/she might become, what he/she would like to

become, and what he/she is afraid of becoming. Thus, such representations provide a link

between one's cognition and one's motivation. The authors further explained:

> Possible selves are the cognitive components of hopes, fears, goals, and
> threats, and they give the specific self-relevant form, meaning,
> organization, and direction to these dynamics. Possible selves are
> important, first, because they function as incentives for future behavior
> (i.e., they are selves to be approached or avoided) and second, because
> they provide an evaluative and interpretive context for the current view of
> self. (p. 954)

Thus, our images of our possible selves are a driving force for our behavior, most

recognizable in the goals we set for ourselves and the anxiety that ensues when failure

occurs.

Individuals may create and access many possible selves; however, these selves are

constructed from a sociocultural context. That is, individuals develop selves based on

their experiences with the environment in their interactions with others. Role models,

images, and symbols provided by the media often provide the basis for the development

of possible selves. Thus, the number and kinds of possible selves are limited by one's

access to images and models of those selves. One cannot create a self of which one has

no knowledge. Furthermore, concrete and vivid images of possible selves are more

motivating than vague concepts (Latham & Locke, 1991; Locke & Latham, 1990).

Markus, Cross, and Wurf (1990) proposed that such concrete representations include the steps necessary to achieve the possible self (i.e., what he or she has to do to become that self). Likewise, one has a fairly clear concept regarding the behaviors that lead to the feared possible self. Such conceptions allow the development of approach (to positive possible selves) and avoidance (to negative possible selves) tendencies in behavior (Oyserman & Markus, 1990a).

The notion of possible selves gradually developed from self-concept theories introduced by James (1910), Freud (1925), Horney (1950), and Rogers (1951). These early authors wrote about past, present, and future self-concepts and the ideal self. Since then, the concept of possible selves has drawn the interest of many psychologists and researchers (e.g., Elder, 1980; Meyer, 1985; Stryker, 1984; all cited in Markus & Nurius, 1986). The construct provides bridges linking many areas of psychology, such as cognitive, behavioral, and self psychology. Furthermore, the construct of possible selves has been influential in the study of adolescent and child development, providing a useful way of conceptualizing and researching juvenile delinquency (Newberry & Duncan, 2001; Oyserman & Markus, 1990a) and academic and career aspirations of adolescents (Kao, 2000; Leondari, Syngollitou, & Kiosseoglou, 1998; Yowell, 2000).

In an attempt to further explore this construct, Markus and Nurius (1986) developed a questionnaire asking individuals about their possible selves. Respondents were asked to consider whether they have seen themselves as possessing a certain characteristic, whether they currently possess that characteristic, and whether they see themselves as possibly having that characteristic in the future. One hundred and fifty possible selves descriptors fell into six categories. The categories were (a) general

descriptors found in many self-concept categories (creative, intelligent, etc.), (b) physical descriptors (good-looking, athletic, etc.), (c) life-style possibilities (having an active social life, being an alcoholic, etc.), (d) general abilities (able to fix things, good cook, etc.), (e) occupational possibilities (business executive, supreme court justice, etc.), and (f) possibilities in perception of self by others (being appreciated, loved, unpopular, feared, etc.). Approximately one third of the possibilities in the questionnaire were judged to be positive, one third negative, and one third neutral. For each of the possibilities, respondents were asked whether it described them now, whether it described them in the past, whether the item was ever considered as a possible self, how probable the self was for them, and how much they would like the possible self to be true for them.

The authors found that most of the items on the questionnaire were endorsed by many of the college respondents in the initial study. However, very few of the individuals in this sample believed they would be a janitor, welfare recipient, spouse or child abuser, or prison guard. The respondents in this sample, in general, endorsed more positive possible selves (such as rich, admired, successful, secure, important, a good parent, in good shape, and to travel the world) than negative selves. These results are consistent with other studies on possible selves conducted with a variety of respondents (e.g., Latino boys and girls, Yowell, 2000). Of particular interest, Markus and Nurius found that positive possible selves were not bound by current selves. That is, in spite of current events and circumstances, individuals in general could perceive positive future selves. In fact, most of the respondents endorsed a wide variety of positive possibilities.

Another approach to the measurement of possible selves consists of an open-ended format. Depending upon the domain of interest, researchers have varied the

specific questions asked of respondents. Generally, the questionnaires explain the concept of possible selves and ask respondents to list positive and negative possible selves. Several researchers have found this approach more practical and more successful in accessing possible selves. Leonadari and colleagues (1998) compared answers to such open-ended possible selves questions with academic achievement and motivation in high school students. They found that students with academically successful possible selves were more likely to achieve in academics in comparison to other groups. Likewise, those who perceived such achievement to be a result of hard work obtained higher grade point averages.

Other studies have focused on the impact of possible selves in achievement of minority students. For example, Kao (2000) examined discrepancies between African American and Hispanic students' academic aspirations and their actual achievement. Compared to White students, these groups have similar aspirations but achieve significantly less. Additionally, Asian students tend to have high academic hopes and outperform White students in actual achievement. After examining students' responses to open-ended questions regarding possible selves, Kao concluded that students' concepts of their possible selves were shaped by the stereotypes they faced. Thus, given African American and Hispanic negative academic stereotypes, these students spent much of their energy trying to avoid the negative possible selves and developed fewer positive possible selves in comparison to the White students. Asian students, on the other hand, felt quite compelled and motivated by their high-achieving possible selves and outperformed the other students.

Oyserman and colleagues (Oyserman, Gant, & Ager, 1995; Oyserman & Markus, 1990a, 1990b, 1993; Oyserman & Saltz, 1993) have investigated possible selves among minority youth in the context of juvenile delinquency and academic success. These authors have suggested that *balanced* possible selves, or development of both positive and negative possible selves, are important for adequate behavioral control. They assert that the development of both positive and negative future concepts in the same domain (e.g., academics, careers, relationships, etc.) help to motivate behavior and improve the likelihood of future success. For example, a student who hopes to obtain a bachelor's degree in a given field may conceptualize this hoped-for self while also considering the consequences of not achieving this goal. In this case, perhaps stopping at a high school diploma represents the alternative or feared self. Thus, with clear representations of both scenarios, the student may be more motivated to follow through with the necessary requirements of achieving his or her goal. In their research, Markus and Nurius (1986) found that the majority of respondents tend to generate more positive than negative possible selves. If this is truly the case, then one could question if balanced selves result in improved outcome for most people, or if its benefits are limited to ethnic or racial minority individuals whose feared possible selves may embody discriminatory, negative stereotypes. The motivating power of the negative possible selves observed by Oyserman and colleagues may derive from the negative cultural stereotypes attached to the feared possible selves reported by youth in their studies. As applied to Appalachian youth, the negative, hillbilly stereotype described previously may serve as a powerfully motivating feared self for some high school students.

The Present Study

It was hypothesized that the major influences discussed—academic preparation,

family, and culture—are associated with educational aspirations in an indirect manner.

Otto (1986) stated that students'

> aspirations are formed in part by their own assessments of their potential based on
> their mental ability and academic performance in school; and their aspirations—
> how far they want to go—are important determinants of their educational and
> occupational achievements. (p. 249)

Thus, these academic factors are posited to influence the academic and occupational

possibilities that an individual conceives for him or herself.

Similarly, expectations of others—family, peers, teachers, and so forth—influence

the goals and dreams for what they will become (Otto, 1986). The discussion of family

factors that influence the college decision stressed the significance of parents and SES on

how students view themselves. Parents instill values in their children and guide their

concepts of who they are and who they could be. SES also impacts this process by

permitting or limiting opportunities to experience people and situations that can impact

dreams and goals. Thus, family factors have a direct impact on the future possibilities a

student envisions for him or herself (Bronfenbrenner, 1986).

Finally, culture impacts the possible selves one experiences by guiding the

opportunities students have to explore possibilities. A cultural context that is different

from the majority or dominant culture can impact students by limiting opportunities to

excel or achieve on standardized measures (often derived from or based on dominant

culture values and experiences). Cultural context may also influence students in positive

ways by instilling values compatible with the type of success desired. Culture provides

the guiding context within which one envisions his or her successes or failures. Thus, one's culture will guide the development of his or her possible selves.

Given the circumstances in which many adolescents from rural Appalachia are raised, one may wonder about this population's perception of possible selves and the relationship, if any, to students' decisions regarding whether to pursue higher education. Poverty, general lack of educational achievement, and high rates of unemployment and reliance on federal assistance are some environmental factors that are likely to influence the development of possible selves. It is hypothesized that students' perceptions of the attainability of hoped-for possible selves are related to college aspirations, such that students who view professional hoped-for selves as more feasible are more likely to be college bound. Likewise, endorsement that feared possible selves are likely to come true is probably associated with decisions not to attend college. These hypotheses are supported by the results of the two Appalachian studies (Chenoweth & Galliher, 2004; Spohn et al., 1992). Factors influencing the students' decisions not to attend college included a lack of positive role models in achievement settings and lower self-esteem and self-concept in academics.

Based on the literature review of possible selves, an open-ended questionnaire that examines students' possible selves seemed most practical for the purposes of the current study. Open-ended formats allow students to formulate their own responses, providing an unrestricted evaluation of their aspirations and fears. Closed-ended formats require an extensive list of possible selves, and may lead students toward possible selves that they may not otherwise consider on their own. In addition, investigators of some prior studies of possible selves used very general questions in this open-ended format,

yielding a wide variety of responses that are of little concern in the present study (e.g., "own a Z-28 and airplane," "learn to sail," "be fifteen pounds lighter"; Cross & Markus, 1991). Because educational and occupational aspirations are the primary interest in the present study, an open-ended questionnaire format asking specifically about academic and occupational selves seemed most appropriate.

In summary, influences such as individual characteristics, family, peers, and culture were hypothesized to relate to the possible selves that one envisions. In turn, possible selves would predict the educational aspirations one forms. Thus, the formation of possible selves is a probable mediator between these influences and educational goals. This Mediated Influences Model is depicted in Figure 2.

Hypothesis

The primary hypothesis examined in this study is that the Mediated Influences Model (Figure 2) adequately describes influences in the college attendance decisions of Appalachian youth. Academic preparation, family, and culture were expected to be associated with the possible selves that one envisions. Then, possible selves influence the types of educational (and thus occupational) aspirations of these students, manifested in their immediate decisions regarding college attendance and defining their long-term educational goals.
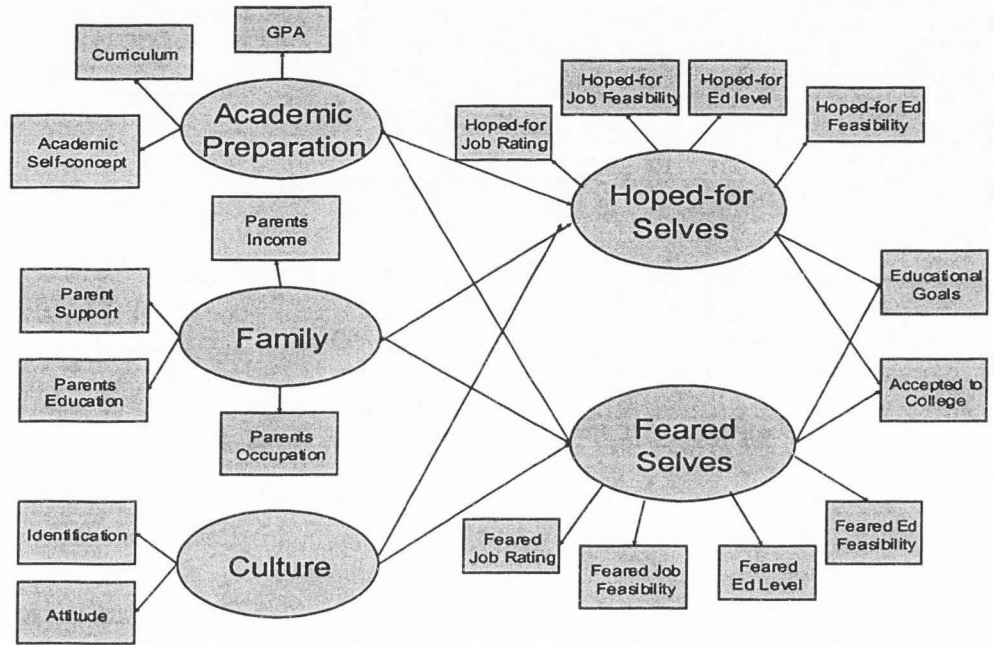
Figure 2. The Mediated Influences Model.

CHAPTER III

METHODS

Design

The current study examined similarities and differences between subjects using a

quasi-experimental design, examining differences between high school seniors who

aspired to higher education and had been accepted to a four-year college or university and

those who had not. A survey method was used for data collection, by individuals not

associated with evaluation or reporting of results. Collection of data was reliant upon

self-report of students' experiences. Primary analyses were correlational in nature.

Participants

The target population for the current study was Appalachian high school seniors

in West Virginia. Because West Virginia lies in the heart of Appalachia, students from

this state are likely representative of the Appalachian region. A total of 215 (106 male

and 109 female) out of 516 high school seniors from six schools in rural counties

(populations under 30,000 in each county, based on July 2002 County Population

Estimates from the Population Division, U.S. Census Bureau) of West Virginia

participated in the study. Students were recruited based on their schools' agreement to

participate. Approximately 52 schools in West Virginia were contacted; the remainder

either declined to participate or did not follow through with data collection. The most

rural counties of West Virginia were selected for recruitment. Rural communities may be

more likely to retain the Appalachian values of historicism, localism, and familism, while more urban communities may be more influenced by the broader American culture. School principals were contacted by phone and invited to participate in the study. All seniors in each participating school were eligible to participate; however, some students under the age of 18 may have been excluded from participation if their parents objected to their involvement in the study. Student participants completed the surveys on a voluntary basis. The mean age of participants was 18.24 with ages ranging from 16.42 to 19.75. The majority of these students were White (94.9 %), with a small percentage of participants from other racial and ethnic groups.

Procedure

An anonymous questionnaire was e-mailed, faxed, or mailed to school principals who agreed to participate in the study. Parents were informed of the study approximately one week before data collection occurred in the form of a letter sent home with seniors. Parents were instructed to contact school personnel if they did not wish their child to participate, or they simply had their student decline participation in the study. Students completed the questionnaire approximately one month prior to graduation, and most students had plans regarding their immediate educational futures at the time of data collection. All participants completed the questionnaires voluntarily and anonymously in their classrooms; the questionnaire was administered by teachers or administrative personnel. A cover page attached to each questionnaire explained informed consent. Completion of the questionnaire took approximately 30 minutes. Questionnaires were coded by county/high school and by individual participant using number combinations.

All questionnaires were mailed to the researcher once completed and individual participants were not identifiable.

Instrumentation

The questionnaire was comprised of three sections; the Demographics/College Choice survey, the Possible Selves Questionnaire, and the Appalachian cultural identity survey (see Appendix). All measures were combined into one questionnaire, with a cover letter attached describing the nature and purpose of the study, procedures, voluntary nature of participation, risks and benefits of the study, confidentiality, and parental consent for minors.

Demographic Information/ College Choice Survey

Because no existing demographic survey captured the information desired for the study, the Demographics/College Choice Survey was adapted from Chenoweth and Galliher (2004) to address this need. Findings from previous studies conducted on higher education participation (Spohn et al., 1992) provided ample information regarding relevant influences on the college decision process. The survey, developed by the investigator, consisted of 20 questions asking participants about demographic data, whether or not they plan to attend college (4-year, 2-year, community college, military, technical school, etc.), and possible influences of that decision (peers, parents, finances, academic achievement and planning as represented by GPA and college preparation courses).

Adapted Exploratory Piers-Harris Academic
Self-Concept Scale (Halote & Michael, 1984)

Based on a review of the literature, it was determined that a measure of

confidence in academic settings would provide some needed data regarding this aspect of

academic preparation in the college decision process. A 17-item exploratory academic

self-concept scale derived from the Piers-Harris Children's Self Concept Scale was

examined for utility in the current study. This scale was selected based on its availability

(for research purposes) and its fit with a survey method of data collection. Halote and

Michael administered the subscale to 203 community college students to test the

reliability and validity of the measure. Items were scored two points for a "yes" response

and one point for a "no" response. The researchers obtained a total academic self-concept

score for each student, and reported the mean score for the sample as 24.00, with a

standard deviation of 3.66. The authors reported that this exploratory academic self-

concept scale was significantly correlated ($p < .01$) with five out of six other measures of

academic self-concept, and had an internal-consistency estimate of reliability (coefficient

alpha) of .55. In closer examination of the construct validity of this measure, the

researchers identified three factor dimensions: Anxiety, Confidence in Academic Ability,

and Perceived Ineptness/Alienation. However, factor analysis revealed that several of the

items were not adequately correlated with one another. As a result, this researcher

selected items from the subscale using the criterion that they demonstrated factor

loadings of 0.40 or higher on one of the three components (Anxiety, Confidence,

Perceived Ineptness/Alienation). Ten items were selected and incorporated into Section I

of the survey. Students responded to these items using a 5-point Likert-type scale

(allowing more variety in responding versus yes/no responses), and an overall mean academic self-concept score was obtained for each student.

Once data were collected for the current study, a principal component factor analysis with Varimax rotation was conducted for these 10 items (Table 1). This analysis yielded two components, one for items associated with competence in school and another for items related to self-derogation and distress regarding academics. All 10 items were retained in order to capture a more comprehensive view of academic competence, including both confidence and reduced anxiety about academic tasks. Items were averaged to yield a total academic competence score and yielded an internal-consistency estimate (coefficient alpha) of .80 for the current sample. A correlation matrix of the items is provided in Table 2.

Table 1

Principal Components Analysis of Academic Self-Concept Scale

Components	Component loadings	
	1	2
1. Competency		
Eigenvalue = 3.73 37.25% variance (rotated) $\acute{\alpha}$ = .81		
Can give good presentations	.75	.12
Good at doing school work	.53	.36
I am smart	.70	.38
Important member of the class	.82	.02
Classmates like my ideas	.69	.00
I am a good reader	.56	.42
2. Self-derogation and distress		
Eigenvalue = 1.33 13.26 % variance (rotated) $\acute{\alpha}$ = .60		
Worried about tests	.03	.71
Slow at finishing school work	.06	.66
Forget what I learn	.14	.64
Get nervous when the teacher calls on me	.32	.56

Note. Factors accounted for 50.5 % of the variance.

Table 2

Academic Self-Concept Scale: Item Correlations

Items	Good presentations	Good at school work	I am smart	Important member	Classmates like my ideas	I am a good reader	Worried about tests	Slow at school work	Forget what I learn	Get nervous
Good presentations	1.00	0.38**	0.45**	0.46**	0.42**	0.39**	0.10	0.11	0.15*	0.44
Good at school work	0.38**	1.00	0.45**	0.37**	0.26**	0.34**	0.21**	0.26**	0.27**	0.24**
I am smart	0.45**	0.45**	1.00	0.60**	0.34**	0.57**	0.29**	0.25**	0.31**	0.32**
Important member	0.46**	0.37**	0.60**	1.00	0.47**	0.38**	0.09	0.11	0.14	0.26**
Classmates like my ideas	0.42**	0.26**	0.34**	0.47**	1.00	0.31**	0.14*	0.09	0.18*	0.17*
I am a good reader	0.39**	0.34**	0.57**	0.38**	0.31**	1.00	0.25**	0.25**	0.30**	0.32**
Worried about tests	0.10	0.21**	0.29**	0.09	0.14*	0.25**	1.00	0.25**	0.26**	0.34**
Slow at school work	0.11	0.26**	0.25**	0.11	0.09	0.25**	0.25**	1.00	0.26**	0.24**
Forget what I learn	0.15*	0.27**	0.31**	0.14	0.18*	0.30**	0.26**	0.26**	1.00	0.29**
Get nervous	0.44	0.24**	0.32**	0.26**	0.17*	0.32**	0.34**	0.24**	0.29**	1.00

$*p< .01, **p< .001.$

Possible Selves Questionnaire

The Possible Selves Questionnaire, adapted from Cross and Markus (1991), asked participants (in an open-ended format) to provide their hoped-for and feared possible selves with regard to occupations and educational levels. For the top two hoped-for selves and the top two feared selves listed, students were asked "How capable do you feel of accomplishing (preventing) this possible self?" and "How likely do you think this possible self is to come true?" Inter-item correlations for the Possible Selves Questionnaire are provided in Tables 3 and 4. Several observed variables were derived

from responses to items on the questionnaire, and the internal-consistency estimates (coefficient alphas) for these variables were as follows: .65 for hoped-for job ratings, .80 for hoped-for job feasibility, .89 for hoped-for education feasibility, .85 for feared job ratings, .93 for feared job feasibility, and .91 for feared education feasibility. Two variables were assessed with only one item each: hoped-for education level and feared education level.

Table 3

Hoped-For Selves Inter-Item Correlations

Items	#1 hoped-for job rating	#1 job capability	#1 job likelihood	#2 hoped-for job rating	#2 job capability	#2 job likelihood	Hoped-for education level capability	Hoped-for education level likelihood
#1 hoped-for job rating	1.00	0.42**	0.42**	0.52**	0.33**	0.33**	0.38**	0.38**
#1 job capability	0.42**	1.00	0.71**	0.18*	0.39**	0.38**	0.40**	0.42**
#1 job likelihood	0.42**	0.71**	1.00	0.20*	0.33**	0.43**	0.45**	0.50**
#2 hoped-for job rating	0.52**	0.18*	0.20*	1.00	0.32**	0.36**	0.22**	0.20**
#2 job capability	0.33**	0.39**	0.33**	0.32**	1.00	0.76**	0.37**	0.32**
#2 job likelihood	0.33**	0.38**	0.43**	0.36**	0.76**	1.00	0.42**	0.44**
Hoped-for education level capability	0.38**	0.40**	0.45**	0.22**	0.37**	0.42**	1.00	0.81**
Hoped-for education level likelihood	0.38**	0.42**	0.50**	0.20**	0.32**	0.44**	0.81**	1.00

$* p < .01, ** p < .001.$

Table 4

Feared Selves Inter-Item Correlations

	#1 feared job rating	#1 feared job avoidance capability	#1 feared job avoidance likelihood	#2 feared job rating	#2 feared job avoidance capability	#2 feared job avoidance likelihood	Feared education level avoidance capability	Feared education level avoidance likelihood
#1 feared job rating	1.00	0.33**	0.34**	0.76**	0.24**	0.21**	0.12	0.01
#1 feared job avoidance capability	0.33**	1.00	0.88**	0.35**	0.80**	0.72**	0.48**	0.36**
#1 feared job avoidance likelihood	0.34**	0.88**	1.00	0.35**	0.71**	0.74**	0.46**	0.32**
#2 feared job rating	0.76**	0.35**	0.35**	1.00	0.38**	0.38**	0.30**	0.24**
#2 feared job avoidance capability	0.24**	0.80**	0.71**	0.38**	1.00	0.87**	0.42**	0.36**
#2 feared job avoidance likelihood	0.21**	0.72**	0.74**	0.38**	0.87**	1.00	0.49**	0.41**
Feared education level avoidance capability	0.12	0.48**	0.46**	0.30**	0.42**	0.49**	1.00	0.83**
Feared education level avoidance likelihood	0.01	0.36**	0.32**	0.24**	0.36**	0.41**	0.83**	1.00

$* p < .01, ** p < .001.$

Appalachian Culture

An Appalachian cultural measure was developed for this study to assess students' identification with a description of Appalachia. A paragraph was written by the author, describing rural Appalachia from the viewpoint of an inhabitant. The description was based on personal experience and other descriptions found in Appalachian literature (e.g., O'Brian, 2001; Obermiller & Maloney, 2002). Feedback on the measure was solicited from an expert in Appalachian culture, referred to this author by the Appalachian

Regional Commission. The expert was in agreement that the passage accurately reflected rural Appalachia, but noted that it likely would not be representative of individuals in metropolitan areas. Students were asked to read the paragraph then circle a number indicating how closely they identified with the passage. Three questions followed, providing students with opportunities to write about their perceptions of Appalachia.

CHAPTER IV

RESULTS

Descriptive analyses were conducted in order to summarize the data collected.

Means and standard deviations or frequencies are provided for all observed variables.

Then, structural equation modeling was utilized to determine the fit of the Mediated

Influences Model. Analyses were performed with Amos 4.0 (Arbuckle, 1999) computer

software, using a maximum likelihood estimation procedure; various measures of fit,

such as chi-square, Root Mean Square Error of Approximation (RMSEA), Normed Fit

Index (NFI), Relative Fit Index (RFI), and Comparative Fit Index (CFI) were used to

assess the fit of the model to the data. Structural equation modeling (confirmatory factor

analysis plus multiple regression analysis) allowed for an examination of the entire model

at once, evaluating the overall adequacy of the model, as well as the specific fit of each

hypothesized pathway.

Descriptive Analyses

Descriptive statistics for each observed variable are listed in Tables 5 through 8.

In Table 5, the mean GPA is provided based on a standard 4.0 scale. Academic self-

concept is based on a 5-point scale, with 5 indicating the strongest sense of self-

confidence in academic settings. Parents' occupational prestige is the mean of the

prestige ratings of both parents'(or one when a parent is absent) occupations as defined

by Stevens and Hoisington (1987), with a possible range from 15 to 80, and 0 used here

to indicate unemployment. Parents' education is the mean rating of the levels of

Table 5

Descriptive Statistics - Continuous Variables

Variable	n	M	SD
GPA	207	3.22	0.60
Academic self-concept	207	3.49	0.62
Parents' occupational prestige	188	35.47	15.26
Parents' education	213	3.50	1.43
Parent support	208	1.44	0.78
Valence of passage	191	2.88	1.08
Appalachian descriptors	140	2.19	0.64

Table 6

Frequencies for Categorical Variables

Variable		n	%
High school curriculum	Vocational	28	13.5
	General	91	43.8
	College prep	88	42.3
	Other	1	0.5
Family income	Under $15000	22	10.2
	$15000 - $29999	41	19.1
	$30000 - $44999	54	25.1
	$45000 - $59999	38	17.7
	$60000 - $74999	20	9.3
	$75000 or more	19	8.8
Students accepted and attending college	Yes	90	41.9
	No	117	54.4
Ultimate educational goals	HS diploma/GED	17	7.9
	Voc/job training	32	14.9
	Associates	35	16.3
	Bachelors	50	23.3
	Graduate degree	70	32.6
	Other	6	2.8

Table 7

Possible Selves Descriptive Statistics

Variable		*n*	*M*	*SD*
Hoped-for jobs	Number generated	191	3.16	1.81
	Importance rating for top two jobs	183	8.29	1.40
	Capability of attaining	188	8.34	1.24
	Likelihood of attaining	182	8.00	1.37
	Feasibility of attaining	188	8.18	1.22
Feared jobs	Number generated	184	2.87	1.83
	Importance rating of avoiding top two jobs	165	8.86	2.00
	Capability of avoiding	177	8.81	1.86
	Likelihood of avoiding	170	8.74	1.75
	Feasibility of avoiding	177	8.75	1.81
Hoped-for education	Capability of attaining	189	8.63	1.32
	Likelihood of attaining	189	8.52	1.41
	Feasibility of attaining	189	8.57	1.30
Feared education	Capability of avoiding	176	8.41	2.00
	Likelihood of avoiding	176	8.34	1.90
	Feasibility of avoiding	176	8.38	1.86

Table 8

Possible Selves Education Levels Frequencies

Variable		*n*	%
Hoped-for education level	High school diploma	8	3.7
	Job skills/Voc training	31	14.4
	Associates degree	31	14.4
	Bachelors degree	51	23.7
	Masters degree	43	20.0
	Doctorate	25	11.6
Feared education level	No high school diploma or GED	18	8.4
	GED	7	3.3
	High school diploma	90	41.9
	Job skills/Voc training	3	1.4
	Associates degree	22	10.2
	Bachelors degree	22	10.2
	Masters degree	8	3.7

education achieved by either parents (or one when a parent is absent). Education ratings are as follows: 1 = Did not graduate high school or obtain GED, 2 = Obtained GED, did not graduate high school, 3 = Graduated high school, 4 = Technical/vocational training, 5 = Obtained (2-year) Associates degree, 6 = Obtained Bachelors degree from a college/university, 7 = Obtained masters degree, 8 = Obtained doctorate degree.

Parent support is the mean rating of perceived encouragement or discouragement for students to go to college, ranging from -2, "My parent(s) feel very strongly that I should not go to college," to 2, "My parent(s) feel very strongly that I should go to college." Valence of passage refers to students' identification with the paragraph describing Appalachia, ranging from 1 (not much) to 5 (a lot). Appalachian descriptors is the mean rating of the types of descriptions that students provided of Appalachia, ranging from 1 to 3, 1 indicating negative descriptors, 2 indicating neutral ones, and 3 reflecting positive statements about Appalachia.

Tables 7 and 8 summarize descriptive statistics regarding possible selves. Importance ratings, capability and likelihood means were calculated based on students' top two choices for hoped-for jobs and worst two choices for feared jobs. To obtain feasibility estimates, capability and likelihood ratings were combined into one mean. All ratings ranged from 1 to 10, 1 indicating least important, least capable, and least likely, and 10 indicating most important, most capable, and most likely.

Testing the Mediated Influences Model

The Mediated Influences Model was first examined using maximum likelihood estimation with Amos 4.0. Missing data necessitated that AMOS estimate means and intercepts for all variables. Allowing the exogenous latent constructs (Family, Academic Preparation, and Culture) to intercorrelate resulted in an inadmissible solution so the three latent constructs were assumed to be uncorrelated in the final analysis. The analysis yielded χ^2 (144) = 506.11, p < .001, with a chi-square to degrees-of-freedom ratio of 3.52. A significant chi-square statistic is generally interpreted as representing a poor fit between the model and the data. However, McIver and Carmines (1981, p. 80) suggested that chi-square to degrees of freedom ratios in the range of 2 to 1 or 3 to 1 are indicative of an acceptable fit. In addition, when models are based on small samples, the chi-square test may not be an adequate representation of fit because the obtained chi-square may not be distributed as χ^2. Other indices of fit demonstrated adequate fit of the data with the model (NFI = .95, RFI = .94, CFI = .96), with each of the indices falling above the suggested minimum of .90 (Arbuckle, 1999). The RMSEA yielded a value of .108, which is on the borderline of acceptable values. However, again, small sample sizes may distort the value of this measure. Overall, it appears the Mediated Influences Model provides an adequate fit with the data, albeit not an excellent one. Squared multiple correlations indicated that the model accounted for 81% of the variance in hoped-for selves, 25% of the variance in feared selves, 88% of the variance in educational goals, and 50% of the variance in college acceptance.

Path coefficients are provided in Figure 3. Using an alpha of .05, significant paths emerged between the latent variable of academic preparation and the observed variables. Similarly, significant paths emerged between the latent family variable and all of its associated observed variables. The path between the latent variable culture and the observed variable attitude was not significant, suggesting that this construct was not adequately supported. The paths between all observed variables associated with the hoped-for selves latent variable were significant, and all but one path (feared education) for the feared selves construct were significant. The paths between academic preparation and both hoped-for and feared selves were strong and significant. However, the paths between family influences and both hoped-for and feared selves, as well as those between
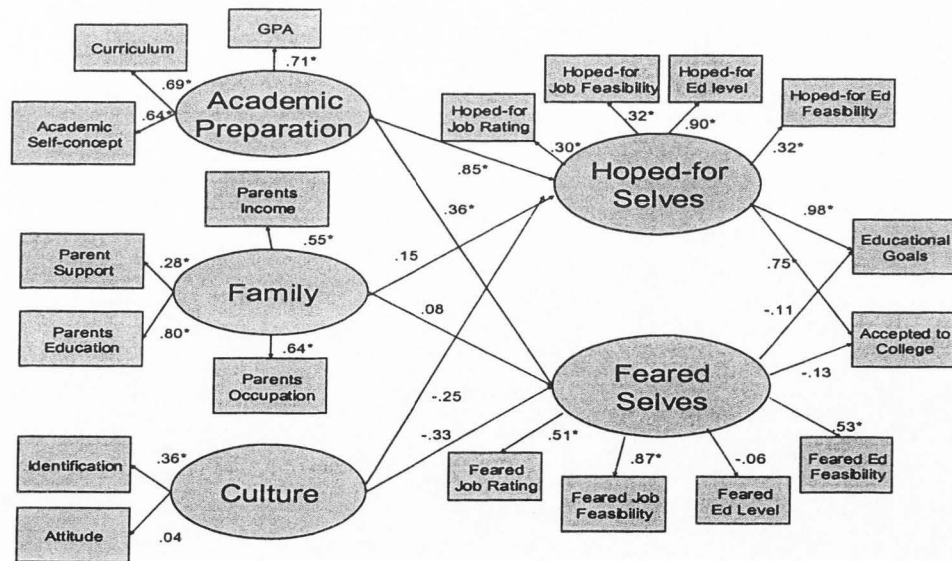

Figure 3. Path coefficients for the Mediated Influences Model.

culture and both hoped-for and feared selves, were not significant. The path between

hoped-for selves and educational goals was strong and significant, as was the path

between hoped-for selves and college acceptance. These paths were not significant for

the feared selves.

<div align="center">Revising the Mediating Influences Model</div>

Examination of the bivariate correlations among the variables (provided in Table

9) suggested an alternative model that also fits with theoretical expectations regarding

relationships among the latent constructs assessed in this study. In the revised model, it

was proposed that the latent variables of family and culture impact students' academic

preparation, which, in turn, influences the possible selves generated and the student's

academic goals. Further, two observed variables were removed from the revised model

based on their performance in the original model. The observed variable, parental

occupational status, yielded an unacceptably large estimated error variance in the original

model and was removed from the family construct in the revised model. Second, the

observed variable, feared education level, did not contribute to the latent construct of

feared selves in the original model and was removed from the construct in the revised

model. Again, the exogenous latent constructs, culture and family, were not allowed to

intercorrelate and were assumed to be independent in the final model. This model was

tested, again using Maximum Likelihood estimation with Amos 4.0. The analysis yielded

χ^2 (113) = 343.39, $p < .001$, with a chi-square to degrees-of-freedom ratio of 3.04. Other

indices of fit demonstrate adequate fit of the data with the model (NFI = .96, RFI = .95,

CFI = .98), with each of the indices falling above the suggested minimum of .90

Table 9

Bivariate Correlations

Variables		Academic preparation				Family			Culture	
		GPA	HS curriculum	Academic self-concept	Parents income	Parent support	Parents education	Parents occupation	Identification	Attitude
Academic preparation	GPA	1.00	0.44**	0.47**	0.16*	0.33**	0.25**	0.19**	-0.13	0.08
	HS curriculum	0.44**	1.00	0.39**	0.25**	0.34**	0.29**	0.21**	-0.06	0.08
	Academic self-concept	0.47**	0.39**	1.00	0.23**	0.31**	0.26**	0.25**	0.00	0.25**
Family	Parents income	0.16*	0.25**	0.23**	1.00	0.31**	0.44**	0.34**	-0.21	0.01
	Parent support	0.33**	0.34**	0.31**	0.31**	1.00	0.19**	0.14	-0.08	0.07
	Parents education	0.25**	0.29**	0.26**	0.44**	0.19**	1.00	0.53**	-0.08	0.16
	Parents occupation	0.19**	0.21**	0.25**	0.34**	0.14	0.53**	1.00	0.02	0.17
Culture	Identification	-0.13	-0.06	0.00	-0.21**	-0.08	-0.08	0.02	1.00	-0.03
	Attitude	0.08	0.08	0.25**	0.01	0.07	0.17	0.17	-0.03	1.00

*$p < .01$. **$p < .001$.

(Arbuckle, 1999). The RMSEA yielded a value of .098, which is again on the borderline of acceptable values. Squared multiple correlations indicated that the revised model accounted for 81% of the variance in hoped-for selves, 18% of the variance in feared selves, 88% of the variance in educational goals, and 53% of the variance in college acceptance.

Path coefficients are provided in Figure 4. In this model, significant paths emerged between the latent variables of family and academic preparation, academic
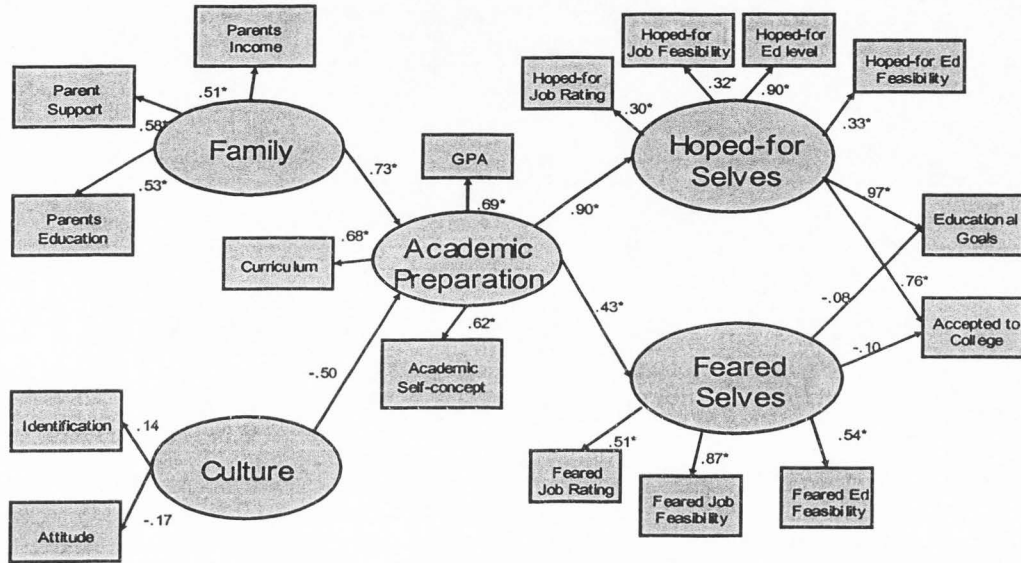
Figure 4. Path coefficients for the Revised Mediated Influences Model.

preparation and hoped-for selves, and academic preparation and feared selves. Similarly,

significant paths emerged between the latent variables of family, academic preparation,

feared selves, hoped-for selves and their respective observed variables. No significant

paths were found between culture and other latent variables, nor were any found between

culture and its observed variables. Finally, although the paths between hoped-for selves

and the observed variables of educational goals and college acceptance were highly

significant, those paths from feared selves to the same observed variables were not. In

summary, the overall fit of the model was improved somewhat in the revised model and

the revised model provided a more precise estimate of the impact of family influences

and academic preparation on educational aspirations. Hoped-for selves was found to be a better predictor of educational aspirations than Feared Selves for future aspirations, and this finding is consistent with the literature.

Qualitative Observations

Culture

The paragraph and questions on the survey regarding cultural influences provoked some mixed reactions. Although some students responded in a fairly straightforward or neutral manner, many students were either dismissive of the local culture as something from which to escape or they strongly defended the local customs and were offended by the survey items. The hillbilly stereotype seemed to anger many students, and they felt the local area had just as much to offer as any other place in America.

Possible Selves

It is interesting to note that some students listed higher education, such as a graduate degree, as a level of education that they feared. Although it is not a personal goal to achieve a certain degree, many students worry they will need a higher degree to make ends meet. As bachelor's degrees become more common, many professional positions now require graduate degrees. Students may not desire to spend the time and money required to obtain such a degree, but nevertheless feel pressured to do so in order to achieve their goals. This realization may be especially daunting for those without financial support and those who wish to have families.

CHAPTER V

DISCUSSION

The goal of this study was to gain a better understanding of the influences in the college decision processes of Appalachian students. Factors, such as academic preparation, family, culture, and hoped-for and feared possible selves were examined in relation to one another through the Mediated Influences Model. Hoped-for and feared possible selves were posited as one mediating mechanism by which family, cultural, and academic experiences are associated with students' decisions to pursue college education. Portions of the mediating model were supported, with academic preparation emerging as the most salient direct predictor of hoped-for/feared selves. The original model was revised to better assess correlates of academic preparation among high school students. The revised model demonstrated a slightly improved fit, both theoretically and statistically.

Overall, the results yielded several items for discussion. Upon examining the descriptive statistics, a few findings were noteworthy. On average, parents' education and socioeconomic status fell in low ranges, with the majority of parents achieving only a high school diploma and earning low incomes. The median income of families in the sample was in the $30,000 to $45,000 per year range, which is consistent with the census data for 2001-2003 (West Virginia is listed at $31,210, the lowest in the nation) However, the majority of students reported that their parents were supportive of higher education. In addition, many students (about 70%) had hopes of achieving college and graduate degrees, and they felt fairly confident that they would succeed in achieving their

goals. So, although many parents were not high achieving academically, students felt encouraged and confident that they could accomplish what they wished with regard to educational goals.

Students' high hopes for college attendance were generally supported by their academic achievement, with reports of high GPAs and the majority of students enrolled in college preparatory (42%) or general education (44%) curricula. Students reported a mean GPA of 3.22 and moderate academic self-confidence (mean of 3.46 on a 5-point scale). They also endorsed high feasibility and capability ratings regarding their ability to achieve their educational and occupational goals and avoid feared possibilities. However, only 41% of students reported that they were accepted at a college, which is lower than the national average of 63.3% (Appalachian Regional Commission, 2005), and lower than rates cited in previous research on Appalachia (Chenoweth & Galliher, 2004; although this research examined only students' intentions, not acceptance rates). So, the question must be posed: why do students with high GPAs and confidence in their plans for higher education report such low acceptance rates? These students may not have been accepted to their colleges of choice for various reasons. Approximately the same number of students enrolled in college preparatory courses reported being accepted into a college, suggesting that some students who are interested in a college education may not have taken the necessary steps to be prepared academically. Students may be enrolling in easier courses and obtaining higher grades, but the courses are not adequate prerequisites to college. Additionally, some students may be unaware of college admission guidelines and their applications are inadequate when compared to other students around the country. It is also possible that students do not apply to college for various reasons, such

as waiting a year or two and opting to work instead. Researchers of previous studies with Appalachian high school students have cited several barriers to applying for college, including lack of information and difficulty understanding, applying for, and receiving financial aid (Chenoweth & Galliher; Spohn et al., 1992).

The Original Mediated Influences Model

In the original model, it was proposed that academic, family, and cultural influences impact the possible selves that one envisions. In turn, possible selves were posited to impact the formation of educational aspirations. Thus, the construct of possible selves was tested as a mediator between family, cultural, and academic influences and educational goals. The overall fit of this model was adequate; however, analysis of individual pathways suggested that some parts of the model were more strongly supported than others.

For example, the pathways between Academic Preparation and both Hoped-for and Feared Selves were strong and significant. This finding is not surprising. Previous researchers have commented on the close association between academic performance and possible selves in youth. For example, Leondari, and colleagues (1998) found that students who envisioned themselves succeeding in an academic sense, formulating specific positive possible selves and achieving as a result of hard work, were more likely to have higher GPAs than other students. In addition, those forming more negative possible selves were more likely to be performing poorly in school, attributing their performance to bad luck (extrinsic) rather than their own effort (intrinsic). In addition, several studies (Day, Borkowski, Punzo, & Howespian, 1994; Oyserman et al., 1995;

Yowell, 2000) have examined the role of ethnic identity in possible selves and academic achievement. Researchers of these studies have concluded that interventions designed to improve academic outcome and success should be aimed at revising possible selves. Thus, possible selves may be thought of as a link between academic preparation and educational and career outcomes.

Using the previous research in the area of possible selves as background, we can speculate regarding the possible reciprocal mechanisms that link academic preparation with possible selves. Students may develop academic self-concepts at an early age, defined by their successes and failures and the encouragement or discouragement they receive throughout their environment (school, home, etc.). Students with greater academic skill and more confidence that they can succeed probably earn higher GPAs and attempt more challenging curricula. At the same time, youth may begin to develop concepts of future selves, succeeding or failing in school and in life. These concepts may provide additional drive and motivation to become what one hopes for and avoid becoming what one fears. Achievement probably becomes incorporated as a part of one's identity.

In contrast to the pathway for academic preparation, the pathway between the latent variables Family and Hoped-for Selves was not significant, nor was the pathway between Family and Feared Selves. This finding is surprising since, in past research, family factors were found to play a strong role in the college decision process (Chenoweth & Galliher, 2004; Spohn et al., 1992). The construct Family held together well, with parents' income, education, occupation, and support of their children's education each contributing significantly to the latent construct. We examined this

finding further in an attempt to understand its meaning. It may be that family factors do have some influence in educational and career outcomes, but not in the manner originally hypothesized. This particular anomaly led to further consideration of the model and will be addressed in the discussion of the revised model.

The association between culture and possible selves was not supported by the results of this study. It was hypothesized that factors such as familism, fatalism, and limited social and economic opportunity might limit the possible selves that Appalachian students' viewed for themselves. For example, while youth who are deeply imbedded in Appalachian culture might desire to pursue a college education and professional career, they might view such opportunities as less feasible because of economic constraints and cultural influences that keep youth tied to their home and family. Our findings did not support this prediction; multiple methodological, conceptual, and theoretical issues may be relevant. First, the construct of cultural influence was not supported well in the model. In the original model, attitudes about Appalachian culture did not contribute significantly to the underlying construct and neither observed variable was significantly associated with the latent construct in the revised model. Chenoweth and Galliher (2004) also found the concept of Appalachian culture to be difficult to quantify, and the more extensive, qualitative effort to capture students' views of Appalachian culture in the current study may not have been adequate. If so, the development of strategies for capturing perceptions of cultural influence continues to be an important research agenda. Alternatively, the lack of consistent findings associated with the culture construct may have been a function of the wide range of student perceptions of Appalachian culture. Students' qualitative responses were comprised of extreme positive and extreme negative

views of Appalachian culture. While some students ardently defended Appalachian culture against perceived insults or stereotyping from outsiders, others disparaged Appalachian culture and confirmed negative stereotypes. These extreme views, when averaged, may have resulted in no overall effect. Finally, it may be possible that cultural factors are not relevant. Some have argued that Appalachian culture is not unique compared to the rest of American society (e.g., Billings, 1974). From this standpoint, Appalachian youth are imbedded in the larger American culture and would be expected to follow similar pathways as other American youth, with influences such as family support, poverty, and academic opportunity serving the same function for Appalachian youth as they do for all American youth.

The original model did provide some support for the construct of possible selves as an important correlate of academic aspirations. Students' hoped-for selves were strongly and significantly associated with college attendance/acceptance, suggesting that adolescents' perceptions of their educational and occupational possibilities may energize the college preparation and application process. However, students' perceptions of their ability to avoid feared selves were not associated with college attendance/acceptance. Thus, it may be that hoped-for selves motivated students in their educational and career aspirations, whereas feared selves did not. This finding is consistent with Kao's study (2000), in which White students were found to be more motivated by high-achieving possible selves relative to negative possible selves. In the current study, it was hypothesized that feared selves may be motivating for Appalachian youth, such that Appalachian students may put forth effort to avoid becoming the hillbilly stereotype or to escape Appalachian fatalism. However, cultural factors did not contribute significantly to

the overall model and the pattern of association between possible selves was not different than seen in previous research. As stated previously, it may be that Appalachian youth are like other White youth in the nation and/or they do not identify with a negative cultural stereotype that they wish to avoid becoming.

As mentioned in the literature review, researchers examining the role of possible selves in delinquency discuss the concept of balanced possible selves (Oyserman et al., 1995; Oyserman & Markus, 1990a, 1990b; Oyserman & Saltz, 1993). To review, hoped-for selves are positive representations that an individual forms of him or herself in the future. Feared selves or negative possible selves are future self-conceptualizations that one generally wants to avoid. Thus, both positive and negative possible selves can be motivating. Oyserman and Markus (1990a) suggested

> …that a given possible self will have maximal motivational effectiveness when it is offset or balanced by a countervailing possible self in the same domain. Thus, a *feared* possible self will be most effective as a motivational resource when it is balanced with a self-relevant positive, *expected* possible self that provides the outlines of what one might do to avoid the feared state. Likewise, a positive expected self will be a stronger motivational resource, and maximally effective, when it is linked with a representation of what could happen if the desired state is not realized. (p. 113)

This balance provides a mechanism for monitoring behavior, as one considers the long-term consequences of his or her actions. Without equally strong negative possible selves, positive possible selves may be conceptualized but not achieved. Thus, ideal possible selves interventions would focus on balancing positive and negative possible selves. Increasing or improving the quality of the hoped-for possible selves a student generates is just as important as helping him or her realistically conceptualize feared possible selves.

For the sample of students who participated in the current research, this author questioned whether possible selves may be unbalanced. The data suggest that students have expectations to obtain a college degree (70%) but may be failing to follow through, which could explain the low college acceptance rate (41%). Additional analyses of the data revealed no significant differences between the number of hoped-for selves and the number of feared selves generated by students going and not going to college. In addition, students described obtaining their first choice of hoped-for job as equally important as avoiding their most feared job. Thus, hoped-for and feared possible selves appear fairly balanced.

Although about 42% of the students feared that their education would halt at a high school diploma, a chi-square analysis revealed that the majority of these students were not accepted to college. Thus, these students appear to have realistic fears but remain hopeful about their academic futures. Markus and colleagues (1990) discussed the importance of salient possible selves, or possible selves that are fairly concrete and well-defined. Hypothetically, if a possible self is not well-defined or vague in nature, it lacks conceptualization of the steps necessary to achieve or avoid a possible self. Perhaps these students have not formed clear concepts of their possible selves and, therefore, they are not motivating. Another possibility is that the feared selves generated by these students are not highly motivating or particularly negative. Finally, it is also possible that some students are simply not capable of obtaining the level of academic performance necessary to earn a college degree; a portion of them may never achieve a college degree, in spite of their aspirations or views of themselves.

The Revised Mediated Influences Model

With consideration to past research, the original Mediated Influences Model was revised. Previous research has found family factors to be highly associated with academic performance, preparation, and aspirations (Chenoweth & Galliher, 2004; Ganderton & Santos, 1995; King, 1996; Otto, 1986; Stage & Hossler, 1989; Thomas, 1998). In order to account for both the influence of family factors and the predominance of academic preparation in predicting hoped-for and feared selves, a more complex model was developed. Because family factors have been previously found to be associated with academic success and aspirations it was posited that family influence may be indirect; specifically, it was hypothesized that academic preparation may serve as an intermediary between family and cultural factors and possible selves. Background factors such as family and culture may contribute to the academic factors under consideration (self-concept, GPA, and curriculum). In turn, both the subjective and objective aspects of academic preparation may provide a knowledge basis for the formation of possible selves. Finally, possible selves may be associated with educational outcome. Statistically, the revised model fit slightly better than the original model, and partially supported these theories. Again, culture did not appear to contribute significantly to the revised model. However, family factors were significantly correlated with academic preparation. It is likely that family background factors, such as parent's education and income, and their support of their children's academic achievement lay the foundation for students' approach to the academic world. As they prepare for their futures, success and failure

could feed their future oriented self-conceptualizations. Thus, the impact of family factors on possible selves may be an indirect, rather than a direct one.

Implications

The current study has implications for both the Appalachian region and the educational system as a whole. Results from the revised model testing mediating influences of possible selves on college attendance are consistent with theoretical assumptions about the development and influence of possible selves. The college decision process for Appalachian youth may begin with influence from family and background, which impacts how one prepares for the future in an academic sense. In addition, there are factors within the family and social system (beyond the students' control) that limit or widen the opportunities available to students, such as SES, parents' education, and available resources within the school system. Students' thoughts of the future are likely influenced by their family background and academic preparation, impacting the number and type of hoped-for and feared possible selves generated. It is viable that educational and career goals are then shaped, and hoped-for possible selves motivate students to achieve those goals. However, the data for the current study assessed students at one time point only and can simply indicate that there is a concurrent relationship between student reports and their aspirations; discussion of the mechanisms of influence in this college decision process remains speculative. The development and influence of possible selves over time must be addressed further in longitudinal research.

Interventions aimed at increasing students' confidence, and thus, higher educational and career aspirations could occur at several levels of the model. Because

parents are primary role models in students' lives, interventions aimed at educating

parents regarding opportunities available to their children would be helpful, especially if

the parent has not been high achieving. In these cases, it would be of great importance to

strengthen the connections between parents and school personnel. School representatives

may find it necessary to reach out to parents who feel intimidated by the educational

system due to their inexperience with it. Getting parents involved in their children's

education is also important, because it may influence how their child performs in school

and plans for the future. Parents and students alike may need more information regarding

the college application process and financial aid, and they may have difficulty asking for

or identifying their needs. This could be accomplished in several ways. For instance,

schools could send packets of information home for students and parents to review early

in a student's high school career, perhaps around the ninth grade. However, the

information could be daunting and difficult to sift through or make sense of, and a series

of workshops for parents and students may be more effective and educational. School

libraries often devote a section to the college decision process, and students and parents

should be permitted access as much as possible. Finally, representatives or contacts to

college admissions and financial aid should be listed and available to answer any

questions that might emerge. In the age of e-mail, getting questions answered should be

fairly easy if one knows who to contact and has access to a computer.

Interventions could occur at the level of school, in students' academic

preparation. Presentations and projects geared toward educating students about possible

career opportunities and educational requirements needed to enter into those careers

could influence the possible selves students form. As stated before, one cannot become

what one has no knowledge of. Students are often not informed of their choices in course work and academic preparation. They may be given a schedule and told to follow that schedule. Guidelines for college admission should be discussed early, so that the student is aware of the consequences of selecting a particular course over another. It is possible that students may choose different paths for themselves if given the opportunity to make educated choices.

Interventions at the elementary and junior high levels may encourage children to see themselves as academically achieving possible selves. Such early intervention is especially important because the academic factors most predictive of success (e.g., curriculum, GPA) must be established well before the senior year of high school. Some researchers have already obtained success with such intervention programs. For example, Day and colleagues (1994) obtained positive results with an intervention program designed to increase positive possible selves in young Mexican American children. After eight sessions of group discussion and education, children who received the intervention reported more positive possible selves and reported more consideration of the connections between behavior, goal development, and future aspirations. Although many schools may already incorporate such interventions into their curricula, it is important to insure that students have access to career education.

In addition, a sense of balance in possible and feared selves may be necessary for goal achievement. Yowell (2000) and Oyserman and Markus (1990) reported that, in addition to developed hoped-for selves, students must also generate feared selves, or conceptualize the consequences of not achieving their goals in order to succeed in achieving those goals. Feared selves help outline the steps that would lead to failure, thus

making it more salient and defining what actions would result in failure. With a clear

picture of the paths available, students become more aware of the work that is needed,

rather than simply hoping for the best. So, the most effective interventions would include

this component and require students to consider fully the paths leading to feared and

hoped-for selves.

<div align="center">Limitations</div>

Several limitations of the study emerged. First, the model may have been

weakened by problems encountered in the possible selves construct. In examining the

types of hoped-for and feared jobs generated, it became evident that many of the

students' hoped-for jobs required less than a bachelor's degree. More specifically, only

54% of the first choice hoped-for jobs and 48% of the second choice hoped-for jobs

required a 4-year college education. The Mediated Influences Model rests on the

assumption that hoped-for jobs are mainly professional jobs, and higher education (i.e.,

bachelor's degree or higher) will be necessary to obtain them. However, this is not

necessarily the case for this sample of students, and possibly reflects a biased perspective.

If higher education and/or professional careers are not valued by a subculture, then the

utility of the model is questionable. It is possible that the model would be more strongly

supported if it were only tested on students with goals of obtaining professional careers.

In addition, the role of culture may have been more strongly supported if the local values

were considered in this regard. For instance, if vocational training is supported to a

greater degree than a bachelor's degree in a particular region, results may have indicated

a better overall fit if vocational training was an outcome variable. It would be interesting

to explore the model's utility in a variety of career paths that may or may not require higher education in various regions, first taking into consideration the cultural values related to higher education and achievement.

Second, the construct of Culture did not adequately hold together. This may be due to inadequate measurement, for the concept of culture is difficult to quantify. It may also be that Appalachian culture is not unique enough to be quantified. Indeed, other researchers have questioned whether it can be considered a unique culture (Billings, 1974). In many respects, the students in this study do not appear to be significantly different from other rural youth in the nation.

Third, longitudinal research in this area is needed. About 42% of the students stated that they were accepted and planned to go to college. It would be more useful to know what proportion of students applied to college, in order to delineate between those who applied and were not accepted and those who simply did not apply. In addition, longitudinal data would provide much needed information regarding attrition. This author would like to know how many students who entered college remained in college, how many graduated from college, and information regarding their success as professionals. Furthermore, it would be most useful to know how many students return to their home areas and positively contribute to the local economy.

Fourth, it is important to note that not all students should go to college. Those who lack motivation to continue their education and those who are unlikely to succeed in a college setting have other options available such as vocational and technical training. However, there are many bright young students in Appalachia who are simply not exposed to the possibilities. The students who are unaware of their potential would

benefit greatly from the interventions described above. Such interventions could improve their academic self-concept and success, which may lead to advanced career goals.

Finally, a major goal of the study was to shed light on the college choice process, in hopes that improving the educational climate of the area would improve the economy. However, if the interventions proposed are implemented, there is no guarantee that young professionals will return to their hometowns, or even their home state. Out migration of youth is a persistent problem in economically deprived rural areas (Stamm, 2003). In order to entice young professionals into the region, incentives are necessary. For some, high quality of life and low cost of living are incentive enough. For others, better school systems and cultural events are important. Rural incentive programs such as loan forgiveness programs would be beneficial, especially if preference is given to natives of the area. Although this is an important piece in solving some of the economic woes of the region, the answers are outside the scope of this study.

In summary, the Mediated Influences Model provides a useful framework for conceptualizing the college choice decision. Family and academic factors are associated with individuals' views of themselves and the possibilities for their future. This study targeted a portion of those factors that have been identified by previous research to influence the decisions made by students in pursuing higher education. The associations between these influences and students' conceptualizations of their possible selves provided some insight regarding the processes involved in this life choice. Results obtained can shape further research in this area and provide a basis for the development and implementation of intervention programs aimed at increasing college attendance in the Appalachian region.

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APPENDIX

COLLEGE DECISION STUDY

Thank you for taking your time to help us with this important study.
Please remove this page and keep it for your records.

About the study: Erica Chenoweth and Professor Renee Galliher in the Department of Psychology at Utah State University are collecting information for a study. Erica Chenoweth grew up in West Virginia and graduated from West Virginia University. She is especially interested in how students like herself make the decision to go to college or not to go to college. You have been asked to fill out this survey because we want to know about the decisions you have made about college. About 300 students in the state of West Virginia have been asked to fill out this survey.

What you can do to help: If you agree to be in this study, you will be asked to complete a survey. The survey asks questions about your thoughts about attending college and plans for the future. It also asks questions about your family background and your feelings about school. We do not want to identify you in any way, so please do not put your name on the form. Since we can not know who you are based on your responses, please be as honest as possible when filling out the survey. It should take about 20 minutes to fill out the survey.

Risks to you: Filling out the survey will not hurt you in any way. Some students may feel uneasy letting researchers know about their personal life, thoughts, and attitudes. Please remember that your name will never be associated with your answers in any way.

Benefits to you: Many students benefit from the chance to re-examine their choices for the future. Filling out the survey also gives them the chance to consider the reasons why they decided to attend or not to attend college.

Any questions: If you have any questions about this project or the survey you completed, you can contact the Principal Investigator, Dr. Renee Galliher, by phone at (435) 797-3391 or by e-mail at rgalliher@coe.usu.edu. You may also contact the Student Researcher, Erica Chenoweth, by phone at (435) 797-1460 or by e-mail at echenoweth@cc.usu.edu.

It's your choice: You are not required to complete the survey. You choose whether or not to fill it out. If you decide to answer the questions on the survey, after you have finished, you can put the survey in the manila envelope at the front of the room. If you choose not to answer, you can put the blank survey in the same envelope at the front of the room and no one will know that you decided not to answer the survey. You may skip over any questions or stop at any time, but you will help us the most by answering every question that you can.

No one will know your answers: ALL of your responses will be completely nameless and unidentifiable. We will NOT ask you for your name, and the answers to these questions will never be associated with you in any way. PLEASE DO NOT PUT YOUR NAME ANYWHERE.

IRB Approval Statement: The Institutional Review Board at Utah State University makes sure people who take part in research are protected. The board has reviewed and approved this research project. The IRB office may be contacted by calling (435) 797-1821.

Your comments: You can write comments on the surveys; in fact, we hope that you will give us lots of opinions and advice!

Permission from parents: Since there are no names on the survey and filling it out will not cause you harm, your parents have been informed of the study through a letter. They have been given the chance to request that you not complete the survey if they object to it in any way.

Demographics/College Choice Survey
PLEASE DO NOT WRITE YOUR NAME ON THIS FORM

PART I

1. How old are you? _____Years and _____Months

2. Are you: _____Male
_____Female

3. Ethnicity _____ Caucasian/White
_____ African American
_____ Native American/ Alaska Native
_____ Hispanic
_____ Asian/Pacific Islander
_____ Other (describe) _____

4. With how many parents do you live? (all kinds of parents: biological, adoptive, step-parents, etc.)
_____Two (both mother and father)
_____One (either mother or father)
_____None (other guardian)

5. Your parents are: _____ married
_____ divorced
_____ separated
_____ never married
_____ one or both deceased
_____ other (specify) _____

6. How many brothers and sisters do you have? _____
What are their ages? _____

7. Do you want to live within 100 miles of your present home for the next 30-50 years of your life?
____Yes ____No ____Unsure

8. Do you think you will live 100 miles of your present home for the next 30-50 years of your life?
____Yes ____No ____Unsure

9. How long have you lived in West Virginia? _____Years and _____Months

If you have lived in West Virginia less than 10 years, where did you live before that?
City_____State_____
How long did you live there? _____
City_____State_____
How long did you live there? _____
City_____State_____
How long did you live there? _____
10. Where did your parents grow up?
Mother: (city or county)_____(state)_____
Father: (city or county)_____(state)_____

11. Father's occupation _____

12. Mother's occupation _____

13. What is the highest education level achieved by each parent (or legal guardian)?

Mother
(Female adult caregiver)

_____Did not graduate high school or obtain GED
_____Obtained GED, did not graduate high school
_____Graduated high school
_____Technical/Vocational training
_____Obtained (2-year) Associates degree
_____Obtained Bachelor's degree from college/university
_____Obtained Master's degree
_____Obtained Doctorate degree (M.D., Ph.D., etc.)

Father
(Male adult caregiver)

_____Did not graduate high school or obtain GED
_____Obtained GED, did not graduate high school
_____Graduated high school
_____Technical/Vocational training
_____Obtained (2-year) Associates degree
_____Obtained Bachelor's degree from college/university
_____Obtained Master's degree
_____Obtained Doctorate degree (M.D., Ph.D., etc.)

14. How many people are living in your family home? _____

15. What is your family's annual income? (check one)

_____under $15,000
_____$15,000-$29,999
_____$30,000-$44,999
_____$45,000-$59,999
_____$60,000-$74,999
_____$75,000 or more

16. Compared to other families in the area, do you feel your family income is less, more, or about the same? _____Less _____More _____About the same

17. Number of brothers and sisters who are attending or have attended college: _____

18. Do you have any extended family members that have attended or are attending college ?
    If Yes, then check the appropriate blanks.
    _____Grandparents
    _____Aunts
    _____Uncles
    _____Cousins
    _____Other (specify) _____

19. Are you graduating from high school or obtaining a GED in May or June, 2003?
    _____Yes _____No

    If No, do you plan to graduate or obtain your GED? _____Yes _____No
    When?_____

20. What is your current grade point average (GPA)? _____

21. Are you planning to continue your education within the first year or two after high school?
    _____Yes _____No

22. If Yes, then where?   Have you been accepted at that school?
  _____4-year college or university   ____Yes ____No ____DK
  _____Military Academy   ____Yes ____No ____DK
  _____Community college   ____Yes ____No ____DK
  _____Technical/Vocational school   ____Yes ____No ____DK
  _____Military, Enlisted   ____Yes ____No ____DK
  _____Other (briefly list here)_____   ____Yes ____No ____DK

23. If Yes, how will your education be paid for? (mark all that apply)
  _____Scholarships
  _____Grants
  _____Student Loans
  _____Parent Loans
  _____Parents
  _____Military
  _____Work
  _____Other_____
  _____Don't Know

24. What are your ultimate educational/professional goals?
  _____High school diploma
  _____Vocational/Job skills training
  _____2-yr degree (Associate's degree)
  _____4-yr degree (Bachelor's degree)
  _____Graduate degree (Master's, Doctorate)
  _____Other (specify)_____

25. Think of your closest friend. What are his/her plans for the future? Is he/she planning to continue his/her education after high school?

        Your friend is: _____ Male _____ Female

        Is he/she planning to continue his/her education?
        _____Yes   _____No   _____ DK (Don't Know)

        If Yes, then where?   Has he/she been accepted at that school?
        _____4-year college or university   ____Yes ____No ____DK
        _____Military Academy   ____Yes ____No ____DK
        _____Community college   ____Yes ____No ____DK
        _____Technical/Vocational school   ____Yes ____No ____DK
        _____Military, Enlisted   ____Yes ____No ____DK
        _____Other (briefly list here)_____   ____Yes ____No ____DK

26. How would you rank your intelligence?
        _____Above average   _____ Average   _____ Below average

27. Are you educationally prepared for college?   _____Yes   _____No   _____Unsure

28. What high school curriculum have you followed?   _____ College preparatory
                                                                                    _____ General
                                                                                    _____ Vocational
                                                                                    _____ Other (specify) _____

29. Which of the following statements best describes your parents' feelings about college?
    (check the **one** statement that fits best)

	My parent(s) feel very strongly that I should go to college.
	My parent(s) would like me to go to college but it is okay if I don't.
	My parent(s) are neutral; that is, they don't push me either way.
	My parent(s) don't really think I should go to college, but they would not discourage me if I wanted to go.
	My parent(s) feel very strongly that I should not go to college.

30. For **each** of the following statements, circle the number that most describes how you feel about school and school work.

1 = Never	2 = Seldom	3 = About as often as not	4 = Very often	5 = Always

a. I can give a good presentation in front of the class.	1	2	3	4	5
b. I get worried when we have tests in school.	1	2	3	4	5
c. I am good at doing school work.	1	2	3	4	5
d. I am slow at finishing my school work.	1	2	3	4	5
e. I forget what I learn.	1	2	3	4	5
f. I am smart.	1	2	3	4	5
g. I am an important member of my class.	1	2	3	4	5
h. I get nervous when the teacher calls on me.	1	2	3	4	5
i. My friends/classmates like my ideas.	1	2	3	4	5
j. I am a good reader.	1	2	3	4	5

List any recommendations to schools or colleges for helping people to attend college or educational programs.

_____

_____

_____

_____

_____

_____

PART II

Possible Selves Questionnaire

Most people think about the future at some time or another. We often think about the kinds of people we will become and what we will be doing in the future. When we are kids, people ask us "what do you want to be when you grow up?" Sometimes we are excited about the possibilities for the future and sometimes we are afraid of what might happen, or what jobs we might have to do in the future.

Some of these ideas about who we will be seem pretty likely, for example, 'being a homemaker' or 'being a store manager'. Others may be only vague thoughts or dreams about the future, like 'being the president'. Also, we may have fears or worries about how we might end up, such as 'being homeless'. Some people may have a large number of possibilities in mind and others may have only a few. In this survey, we are interested in the possible **jobs** you think you might do and the levels in school you imagine yourself reaching.

HOPED-FOR FUTURE - JOBS

Step 1. In the space below, please list all the jobs that you **hope to have** in the future. You do not have to fill in all the spaces, just write as many as you can easily think of.

Step 2. Now, use the following scale to rate each of the jobs you listed. Write the rating on the blank line next to the job.

1	2	3	4	5	6	7	8	9	10
It is NOT very important for me to end up with this job.				It is SOMEWHAT important for me to end up with this job.			It is VERY important for me to end up with this job.		

Step 3. Finally, pick the two most hoped-for jobs that you have listed. In the blanks under "Top Pick", write the #1 next to the best job and #2 next to the second best job. (These jobs should have received your highest ratings of all the jobs you listed.)

Jobs	Rating	Top Pick
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____
f. _____	_____	_____
g. _____	_____	_____
h. _____	_____	_____
i. _____	_____	_____
j. _____	_____	_____

Step 4. Use the following scale to tell us how capable you feel of eventually getting your top jobs. Circle the answers for your first and second choice jobs.

For your first job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all capable of getting this job		not very capable of getting this job		neither capable nor incapable of getting this job		pretty capable of getting this job		completely capable of getting this job	

For your second job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all capable of getting this job		not very capable of getting this job		neither capable nor incapable of getting this job		pretty capable of getting this job		completely capable of getting this job	

Step 5. Use the following scale to tell us how likely you think your dream of obtaining this job is to come true. Circle the answers for your first and second choice jobs.

For your first job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all likely to get this job		not very likely to get this job		neither likely nor unlikely to get this job		pretty likely to get this job		completely likely to get this job	

For your second job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all likely to get this job		not very likely to get this job		neither likely nor unlikely to get this job		pretty likely to get this job		completely likely to get this job	

HOPED-FOR FUTURE - EDUCATION:

Step 1. In the space below, write the **highest** level in school that you hope to reach. Here are some possibilities:

- High school diploma
- Job skills (Vocational) training
- Associate's degree (a 2-year degree from a community college or technical school)
- Bachelor's degree (4-year degree from a college or university)
- Master's degree (M.S. or M.A.; 2-3 years of school after getting a Bachelor's degree)
- Doctorate (Ph.D., M.D., J.D.; 4 or more years after a Bachelor's degree, or 2 or more years after getting a Master's degree; this is required to be a doctor or a lawyer)

Highest level of education: _____

Step 2. Use the following scale to tell us how capable you feel of eventually reaching this level in school. Circle the number that represents how capable you feel.

1	2	3	4	5	6	7	8	9	10
not at all capable of reaching this level		not very capable of reaching this level		neither capable nor incapable of reaching this level		pretty capable of reaching this level		completely capable of reaching this level	

Step 3. Use the following scale to tell us how likely you think your dream of reaching this level in school is to come true. Circle the number that represents how likely it is.

1	2	3	4	5	6	7	8	9	10
not at all likely to reach this level		not very likely to reach this level		neither likely nor unlikely to reach this level		pretty likely to reach this level		completely likely to reach this level	

FEARED FUTURE – JOBS:

In addition to having ideas of who we might like to be in the future, we may have ideas about who we do **not want** to be in the future. We may worry sometimes about these feared future possibilities. Some of these possibilities may seem quite likely, like 'not being accepted to a (particular) college', and others may seem quite unlikely, like 'being homeless'. Some of us may have a large number of feared possibilities in mind and others may have only a few. In this survey, we are interested in feared jobs or levels of schooling; that is, jobs that we are afraid we might have to do or levels of schooling that we will have to stop at.

Step 1. In the space below, please list the jobs that you are afraid you might end up with. Again, you do not have to fill in all of the spaces; just fill in as many as you can easily think of.

Step 2. Now, use the following scale to rate each of the jobs you listed. Write the rating on the blank line next to the job.

1	2	3	4	5	6	7	8	9	10
It is NOT very important for me to avoid ending up with this job.			It is SOMEWHAT important for me to avoid ending up with this job.			It is VERY important for me to avoid ending up with this job.			

Step 3. Finally, pick the two jobs that you are the most afraid of ending up doing. In the blanks under "Worst Pick", write the #1 next to the job that is most important for you to **avoid**, that is, the job you fear most. Then write #2 next to the second worst job, that is, the job you fear the second most. (These jobs should have received your highest ratings of all the jobs you listed.)

Jobs	Rating	Worst Pick
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____
f. _____	_____	_____
g. _____	_____	_____
h. _____	_____	_____
i. _____	_____	_____
j. _____	_____	_____

Step 4. Use the following scale to tell us how capable you feel of **avoiding** ending up in this particular job. Circle the answers for your top two most important jobs to avoid.

For your most feared job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all capable of avoiding having this job		not very capable of avoiding having this job		neither capable nor incapable of avoiding having this job		pretty capable of avoiding having this job		completely capable of avoiding having this job	

For your second most feared job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all capable of avoiding having this job		not very capable of avoiding having this job		neither capable nor incapable of avoiding having this job		pretty capable of avoiding having this job		completely capable of avoiding having this job	

Step 5. Use the following scale to tell us how likely you think it is that you will **avoid** having to work at this particular job. Circle the answers for your top two most important jobs to avoid.

For your most feared job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all likely that I will be able to avoid having this job		not very likely that I will be able to avoid having this job		neither likely nor unlikely that I will be able to avoid having this job		pretty likely that I will be able to avoid having this job		completely likely that I will be able to avoid having this job	

For your second most feared job?   (Please list) _____

1	2	3	4	5	6	7	8	9	10
not at all likely that I will be able to avoid having this job		not very likely that I will be able to avoid having this job		neither likely nor unlikely that I will be able to avoid having this job		pretty likely that I will be able to avoid having this job		completely likely that I will be able to avoid having this job	

FEARED FUTURE - EDUCATION:

Step 1. In the space below, write the level in school that you are afraid you will have to stop. Here are some possibilities:

- High school diploma
- Job skills (Vocational) training
- Associate's degree (a 2-year degree from a community college or technical school)
- Bachelor's degree (4-year degree from a college or university)
- Master's degree (M.S. or M.A.; 2-3 years of school after getting a Bachelor's degree)
- Doctorate (Ph.D., M.D., J.D.; 4 or more years after a Bachelor's degree, or 2 or more years after getting a Master's degree; this is required to be a doctor or a lawyer)

_____

Step 2. Use the following scale to tell us how capable you feel of **avoiding** stopping at this level in school. Circle the number that represents how capable you feel.

1	2	3	4	5	6	7	8	9	10
not at all capable of avoiding having to stop at this level		not very capable of avoiding having to stop at this level		neither capable nor incapable of avoiding to stop at this level		pretty capable of avoiding having to stop at this level		completely capable of avoiding having to stop at this level	

Step 3. Use the following scale to tell us how likely it is that you will **avoid** stopping at this level in school. Circle the number that represents how likely it is.

1	2	3	4	5	6	7	8	9	10
not at all likely that I will be able to avoid having to stop at this level		not very likely that I will be able to avoid having to stop at this level		neither likely nor unlikely that I will be able to avoid having to stop at this level		pretty likely that I will be able to avoid having to stop at this level		completely likely that I will be able to avoid having to stop at this level	

PART III

Appalachian Cultural Identity Questionnaire

Read the following paragraph, then answer the questions that follow.

When I see the lush green mountains, deep forests, ice-cold trout streams, and small hill farms, I know I'm home. I always feel strange when I leave this place, and when I return I feel whole again. It's like I'm part of the land here, or something, and my family are here and they will always be here. The people here are hard working, straight-forward, and rely on common sense. They don't like to confront people and they don't want to be called pushy. When they are good at something, they keep quiet about it, so as to not think too highly of themselves. Good jobs around here are hard to find, and a lot of people are having a hard time making ends meet. Sometimes it seems like they think that things around here will never get better, so why even try. They may even try to talk some of the younger folks out of dreaming too much. Just like the older folks, though, some of the younger folks have strong determination, and they want to stand on their own two feet. Some of my kin have worked (even died) in the coal mines, others barely leave the hollow. Now a lot of people work at the chemical plants or the timber companies. Still they make pretty good money for around here, better than Wal-Mart at least.

1. How much does the above passage sound like you and your experiences?
   (1 = not much, 5 = a lot)   1   2   3   4   5

2. What is the name of the county or city and state that you think of as your home?

_____

3. Do you think of yourself as being from Appalachia? (circle one)   Yes   No

4. List some of the characteristics that you associate with Appalachia and its people.

_____
_____
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**THANK YOU FOR
YOUR TIME AND EFFORT!**

CURRICULUM VITAE

Erica Chenoweth
(October 2005)

EDUCATION

2005   Doctor of Philosophy
        Clinical Psychology
        Dissertation Title: *Appalachian High School Students' Possible Selves as Mediator of Continuing Their Education.*

2003   Master of Science
        Counseling Psychology
        Thesis Title: *Factors that Influence the College Attendance Decisions of Appalachian Students.*

        Combined Professional-Scientific Program, APA Accredited
        Utah State University
        Logan, UT

1995   Bachelor of Arts (Magna Cum Laude, University Honors Scholar)
        Psychology, Minor in *Spanish*
        West Virginia University
        Morgantown, WV

PROFESSIONAL EXPERIENCE

WORK EXPERIENCE

Psychology Intern (August 2004 – October 2005, full-time)
Veterans Affairs Salt Lake City Health Care System, Salt Lake City, Utah

1ˢᵗ 6-month Rotation (August 2004 – February 2005)
Inpatient Mental Health
- Provide individual and group therapies (process and psychoeducational) to veterans admitted to the inpatient psychiatric unit.
- Attend daily rounds, involving a multidisciplinary treatment team discussion of current patient needs and treatment plans and patient interview.
- Consult with other inpatient staff regarding patient treatment and assessment.
- Provide psychological assessment for patients as needed.
- Attend group supervision sessions.

Outpatient Substance Abuse Treatment (OSAT)
- Conduct initial intakes and assessment for veterans interested in receiving treatment for substance abuse and other psychological issues.
- Provide individual therapy to veterans enrolled in the OSAT program.

- Provide group therapy (primarily psychoeducational with some process) to veterans enrolled in Relapse Prevention (1 hour groups) and Intensive Outpatient (2.5 hour groups) programs.
- Attend weekly supervision meetings.

- Act as Presentation Coordinator, which requires organizing and scheduling Intern Presentation Series and coordinating the Interdisciplinary Case Conference, a weekly meeting of professionals from psychology, psychiatry, pain management, palliative care, and other interested parties discussing complex patient care presentations and issues in treatment.

2nd 6-month Rotation
Medical Psychology (February 2005 – October 2005)
  Divided into three two-month Mini Rotations:
  1. Physical Medicine and Rehabilitation (PM&R)
     - Act as a member of the interdisciplinary Rehab team, comprised of representatives from Medicine, Psychology, Nursing, Social Work, Physical Therapy, Occupational Therapy, Speech Pathology, and Dietetics.
     - Attend and participate in Rehab team treatment planning and rounds.
     - Conduct psychological screening of all Rehab patients.
     - Complete Functional Independence Measures (FIMs) for patients at admission and discharge.
     - Assist with treatment planning by offering clinical impressions and recommendations.
     - Monitor cognitive status of patients.
     - Provide brief psychotherapeutic and community re-entry interventions.
     - Facilitate communication between PM&R and MH Consult staff.
  2. Geriatrics Research, Education, and Clinical Center (GRECC)
     - Attend GRECC Clinical Conferences (twice a month), which provide education regarding current issues in geriatric research.
     - Attend Home Based Primary Care team meetings
     - Provide psychological assessment and/or interventions with referred HBPC patients (conducted in patients' homes/care facilities)
     - Provide assessment, interventions, and consultation in Geriatric Medicine/Psychiatric Clinic.
  3. Mental Health Consultation
     - Act as a member of the inpatient MH Consultation-Liason team, comprised of representatives from Psychiatry, Psychology, and Pharmacy, offering clinical impressions to assist in medical treatment and/or disposition planning.
     - Respond to consult requests from all inpatient medical units, including Acute Medicine, Telemetry, Neurology, Surgery, Intensive Care, and Rehab.
     - Attend and participate in daily team rounds.
     - Conduct initial diagnostic evaluations and present findings to the team.
     - Provide brief psychotherapeutic interventions.
     - Complete cognitive and/or personality testing.

- Conduct neuropsychological evaluations in response to consults from medical clinics (Primary Care, Neurology, etc.).
- Conduct psychological evaluations for organ transplant candidates.
- Engage in individual psychotherapy with patients with chronic illness.

- Present/educate at case conferences and team meetings on various topics relevant to patient care and attend weekly seminars, interdisciplinary conferences, and other educational opportunities provided (full year).

Graduate Assistant (September 2000 - May 2002, 20 hrs/week, September 2003 - May 2004, 10 hrs/week)
Utah State University Counseling Center, Logan, Utah
- Provide individual therapy to university students.
- Co-lead Dialectical Behavior Therapy Skills Training groups for individuals with difficulties in regulating emotions.
- Provide comprehensive psychological assessment for students, referred by the Disability Resource Center.
- Supervise a peer counselor weekly, providing additional training opportunities and client referrals.
- Attend professional development seminars.
- Participate in case staffing and administrative meetings.
- Supervised by various Counseling Center staff (rotated each semester), including LuAnn Helms, Ph.D. (current supervisor), Beverly Williams, Ph.D., Gwena Couillard, Ph.D., David Bush, Ph.D., and Mark Nafziger, Ph.D.

Graduate Examiner (February 2003 - July 2003, 5-10 hrs/week)
Utah State University Counseling Center, Logan, Utah
- Provided comprehensive psycho-educational assessment for students through referral from the Disability Resource Center, including administration, scoring, interpretation, and provision of written reports. Supervised by David Bush, Ph.D.

Graduate Assistant (May 2002 - July 2002, 10 hrs/week)
Utah State University Counseling Center/USU Student Services, Logan, Utah
- Coordinated information from various USU Student Services offices for the development and design of a comprehensive parents' website. Utilized Dreamweaver website software for initial phases of development. Supervised by Mary Doty, Ph.D.

Mental Health Specialist (October 1997 - June 2001, 20 hrs/week, June 2002 - August 2002, 10 hrs/week)
Bear River Early Head Start, Logan, Utah
- Provided mental health services to agency clients and staff, including training, education, consultation, and therapy.
- Participated in case staffings, administrative meetings, and grant review proceedings.
- Coordinated mental health component of the program, including development of policies and procedures and providing quarterly reports for the mental health component of the program.
- Maintained records in compliance with APA's ethical standards of record keeping.
- Clinical supervision provided by David Stein, Ph.D.

Mobile Crisis Team Supervisor (July 1995 - May 1997, full-time position)
Valley Comprehensive Community Mental Health Center, Inc., Morgantown, WV
- Hired, trained, and supervised Crisis Intervention Specialists and After Hours On-call staff, which provided emergency services to mentally ill clients.
- Collaborated with local agencies to improve quality and accessibility of crisis services.
- Attended monthly management meetings and reviewed financial reports (grant-funded program).
- Provided continuing education to agency staff.
- Conducted mental health assessments with agency clients.
- Performed as Crisis Intervention Specialist.

Crisis Intervention Specialist, Mobile Crisis Team (December 1994 - May 1997, part-time to full-time position)
Valley Comprehensive Community Mental Health Center, Inc., Morgantown, WV
- Provided on-site crisis stabilization and disposition for individuals in psychiatric crisis.
- Coordinated involuntary hospitalization (commitment) process and disposition thereafter.
- Consulted with hospital emergency room staff at West Virginia University Hospitals (Ruby Memorial, Chestnut Ridge) regarding psychiatric patients and provided placement and referral.
- Provided crisis support services via Valley's Crisis Line.

Crisis Residential Assistant, Short-term Residential Unit (September 1994 - April 1995, part-time position)
Valley Comprehensive Community Mental Health Center, Inc., Morgantown, WV
- Assisted in provision of crisis stabilization services to mentally ill adults through individual and group therapy. Monitored suicidal clients and other high-risk individuals.
- Maintained records of progress of individuals temporarily residing in the center.

CLINICAL PRACTICA

Advanced Clinical Practicum in Trauma (May 2001 - December 2001)
Utah State University Counseling Center, Logan, Utah
Supervisor: Mary Doty, Ph.D.
Provided individual therapy to adults suffering from symptoms of Post-Traumatic Stress Disorder and/or other sequelae of trauma.

Counseling Practicum (August 1999 - May 2000)
Utah State University Counseling Center, Logan, Utah
Supervisor: Mary Doty, Ph.D.
Conducted intakes, crisis consultations, and provided individual and group therapy to full-time University students experiencing psychological difficulties. Attended weekly meetings and seminars, and group and individual supervision.

Case Coordinator, Clinical Services (School/Child Clinical Practicum) (September 1998 - May 1999)
Center for Persons with Disabilities, Utah State University, Logan, Utah
Supervisors: Pat Truhn, Ph.D. and Phyllis Cole, Ph.D
Conducted intakes and assessments for children and adults with psychological disorders. Functioned as part of a multi-disciplinary team that provided comprehensive psycho-educational and medical assessment. Provided diagnoses and recommendations for treatment in feedback sessions with individuals and families. Completed applicable sections of the written psychological report.

Clinical Practicum (February 1998 - May 1999)
Utah State University Psychology Community Clinic, Logan, Utah
Supervisor: Susan Crowley, Ph.D.
Provided individual and family counseling and assessment to individuals experiencing psychological difficulties and maintain adequate records for those individuals.

Practicum Student (Psychology Practicum) (May 1994 - August 1994)
Valley Comprehensive Community Mental Health Center, Inc., Morgantown, WV
Supervisor: Nancy Blake, BA
Provided assistance in case management services such as linkage, advocacy, and crisis intervention for mentally ill/mentally retarded adults. Provided assistance in provision of crisis stabilization services at Valley's Short-term Residential Unit.

TEACHING EXPERIENCE

Teaching Assistant (August 2003 - May 2004)
Utah State University, Department of Psychology
Assist Dr. Renee Galliher in teaching and administrative duties of Psychology 2800, Psychological Statistics. Responsible for approximately 8 lectures per academic year, tutoring students, supervising undergraduate tutors, administering and scoring exams, and maintaining student records.

Teaching Assistant (Spring Semester, 1995)
West Virginia University, Department of Psychology
Assisted Dr. David Schaal and graduate teaching assistant Scott Spalding in teaching/tutoring students enrolled in Psychology 131: Organismic Factors in Psychology. Course work focused on the biological and experimental aspects of psychology and included a computer lab.

RESEARCH EXPERIENCE

Dissertation (September 2002 – October 2005)
Utah State University, Department of Psychology
Appalachian high school students' possible selves as mediator of continuing their education. Co-chairs Renee Galliher, Ph.D. and Tamara Ferguson, Ph.D.

Thesis (February 2002 – March 2003)
Utah State University, Department of Psychology
Factors that influence the college attendance decisions of Appalachian students.
Co-chairs Renee Galliher, Ph.D. and David Stein, Ph.D.

Independent Research (August 2001 - July 2002)
Utah State University Counseling Center
A culturally sensitive model for assertiveness training.
Co-researcher Erica Liu Wollin, Psy.D.

Research Assistant (August 1993-May 1994)
West Virginia University, Department of Psychology
Shaped and maintained weight of four lab rats, and obtained experimental data for the study entitled *The effects of pre-session feeding on food-reinforced lever pressing of rats using a cumulative dosing procedure.*
Supervised by David Schaal, Ph.D.

PRESENTATIONS

Couillard, Gwena, & Chenoweth, Erica. *Dialectical Behavior Therapy Skills Training in Counseling Centers.* Workshop presented at the Utah Counseling Centers' Conference, Park City, Utah, November, 2003.

Chenoweth, Erica, & Galliher, Renee. *Factors that Influence the College Attendance Decisions of Appalachian Students.* Poster session, West Virginia Psychological Association Fall Conference, Morgantown, West Virginia, September 2003.

Chenoweth, Erica, & McFarland, Holly. *Assertiveness Training for Helping Professionals.* Head Start Regional Conference, Salt Lake City, Utah, October 1999.

Krolczyk, Brian, & Chenoweth, Erica. *Mobile Crisis Teams.* Supporting and Empowering West Virginia Families: Acts that Work! The School of Social Work, West Virginia University, Flatwoods, West Virginia, November 1995.

PUBLICATIONS

Chenoweth, Erica, & Galliher, Renee (2004). Factors that influence the college attendance decisions of Appalachian students. *Journal of Research in Rural Education, 19*(2). Retrieved from http://www.umaine.edu/jrre/19-2.htm

HONORS AND AWARDS

West Virginia University Honors Program, 1991-1995
West Virginia University Presidential Scholarship, 1991-1995
Dean's List, West Virginia University, 1991-1995
West Virginia University Presidential Award for Academic Achievement, 1994-1995
West Virginia University, Eberly College of Arts and Sciences Award for Academic Excellence, 1993-1995
Golden Key National Honor Society, inducted 1993
Harold Parsons Trust Scholarship, 1991