

**The Effect of Adolescent-Parent Congruence on the College-Decision Making Process of
Rural Appalachian Youth**

A Dissertation Presented for the

Doctor of Philosophy

Degree

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Dedication

Dedicated to my place of refuge, my husband Zach. Thank you for your constant support, unconditional love, and steady stream of encouragement. Also to my family who has instilled in me a love of education and has always believed in me. Without you, I would have never made it this far.

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Abstract

The purpose of this study was to explore the relationship between adolescent-parent congruence on the SCCT variables of college-going self-efficacy beliefs, college outcome expectations, and college decision-making in rural Appalachian youth. The study addressed three main research questions: *What are the typical levels of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth? How are college-going decisions impacted by the level of adolescent-parent congruence, college-going self-efficacy beliefs, and college outcome expectations of rural Appalachian youth?* and *How do rural Appalachian high school students say that adolescent-parent congruence impacts their college decisions?* Participants in the study were high school seniors enrolled in five rural Appalachian high schools within a single Southeastern state. Data was collected through online surveys. Participants were asked to complete three scales: the Adolescent-Parent Career Congruence Scale-Revised (Sawitri et al., 2012), College Outcome Expectation Scale (Flores et al., 2008), and the College-Going Self-Efficacy Scale (Gibbons & Borders, 2010). Participants were also asked to answer two open response questions and complete a brief demographic scale. Findings indicated that rural Appalachian youth have a moderate amount of congruence with their parents regarding postsecondary plans, moderately high levels of college-going self-efficacy, and high levels of college outcomes expectations. High positive correlations were found between each of these three variables. In addition, multiple variables were found to predict students' adolescent-parent congruence including college-going self-efficacy, college outcome expectations, mother's educational level, and gender. Finally, while students reported moderate levels of adolescent-parent congruence on the quantitative measure, they demonstrated increased incongruence when

asked about incongruence in an open-ended format. Based on these findings, implications for future research, counselors, and counselor educators were provided.

Keywords: rural Appalachia, Social Cognitive Career Theory, college going, high school students

Table of Contents

Chapter 1: Introduction	1
Parental Influence on College-Going.....	2
Rural Appalachia	4
Rural Appalachian Youth	6
Social Cognitive Career Theory.....	9
SCCT Constructs	10
Statement of the Problem.....	12
Purpose of the Study	13
Research Questions	13
Definition of Terms.....	14
Delimitations	15
Limitations	15
Organization of the Study	15
Chapter 2: Review of the Literature.....	17
Historical Perspectives on Higher Education	17
Parental Influence on College-Going.....	19
Family Capital.....	20
ELS (2002).....	20
NELS (1988).....	23
Parental Influence with First-Generation College Students.....	26
First-generation college students	27
General versus concrete support	28
Mixed messages	31
Prospective first-generation college students.....	36
Rural Appalachia	39
Cultural Values	40
Education	42
Rural Appalachian Youth and Families	44
Postsecondary expectations and aspirations	44
Postsecondary attainment.....	46
Postsecondary experiences.....	48
Social Cognitive Career Theory.....	52
Development and Overview	52
Empirical Support for SCCT	54
SCCT and rural Appalachian Youth.....	57
Chapter 3: Method	60
Research Questions	60
Participants.....	61
Procedure	62
Instrumentation	63
Adolescent-Parent Career Congruence Scale - Revised	64
Open-Response Questions	65
College Outcomes Expectations Scale (COE).....	66
College-Going Self-Efficacy Scale (CGSES).....	68

Demographic Scale	69
Data Analysis	70
Research Question 1	70
Research question 1.a.....	70
Research questions 1.b.....	70
Research Question 2	71
Research Question 3	71
Chapter 4: Results	73
Description of Participants.....	73
Research Questions	77
Research Question 1	77
Research Question 1.a.....	79
Gender	79
Parent education level	79
Postsecondary plans	81
Research Question 1.b.	82
Research Question 2	83
Research Question 3	85
Summary	88
Chapter 5: Discussion and Implications	89
Summary of Research	89
Discussion of Major Findings	90
Understanding the Population.....	90
Social Cognitive Variables	93
College-going self-efficacy.....	93
College outcome expectations	94
Adolescent-Parent Congruence.....	96
Incongruence.....	97
Support.....	98
Predictors of adolescent-parent congruence	99
Limitations	100
Implications.....	102
Future Research	102
Counselors and Helping Professionals.....	103
Counselor Educators	105
Conclusion	106
References.....	107
Appendices.....	122
Appendix A: Adolescent-Parent Career Congruence Scale - Revised	123
Appendix B: College Outcomes Expectations Scale	125
Appendix C: College-Going Self-Efficacy Scale	126
Appendix D: Demographic Scale	128
Appendix E: Qualitative Responses: Support.....	132
Appendix F: Qualitative Responses: Incongruence	138
Vita.....	142

List of Tables

Table 4.1. Postsecondary Planning	76
Table 4.2. Descriptive Statistics.....	78
Table 4.3. ANOVA between Adolescent-Parent Congruence and Parent Education Level	80
Table 4.4. ANOVA between College-Going Self-Efficacy and Parent Education Level	81
Table 4.5. Correlation Matrix	83
Table 4.6. Sequential Multiple Regression of Predictors of Adolescent-Parent Congruence	84

Chapter 1

Introduction

“I feel like it’s a struggle for me because I’m so close to my family and I wanna be with them so bad, but at the same time I wanna go to school. So sometimes it’s a struggle that nobody...can really understand” (Bryan & Simmons, 2009, p. 397). This quote from a rural Appalachian student demonstrates a struggle that many students from this region face when making decisions about pursuing a postsecondary education. The Appalachian region is one with rich cultural values including strong family and kinship ties and a sense of responsibility to family (King, 2012; Tang & Russ, 2007). As a result, many rural Appalachian youth often feel torn between their cultural value of family and pursuing a postsecondary education (Bradbury & Mather, 2009). In addition, rural Appalachia is an area characterized by severe economic distress due to its high levels of poverty, unemployment, and limited educational opportunities (Ali & Saunders, 2009; Brown, Copeland, Costello, Erkanli, & Worthman, 2009; Gore, Wilburn, Treadway, & Plaut, 2011). Combined, these economic and cultural aspects create contextual factors that can impact the postsecondary plans of rural Appalachian students (Ali & Saunders, 2006). Many students from rural Appalachia do not feel confident or feel conflicted about pursuing a postsecondary education (Ali & McWhirter, 2006).

These unique characteristics make rural Appalachian students a population with more college and career planning needs than those of traditional high school students. Unfortunately, minimal research exists on this group of students, especially regarding the role of family influence on the college decision-making process (Bryan & Simmons, 2009). This is especially problematic due to the strong value placed on family in Appalachian communities (Bryan & Simmons, 2009; King, 2012; Tang & Russ, 2007). Due to the various contextual factors and

barriers which impact this population, Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) serves as an ideal lens through which to examine this group (Ali & Saunders, 2006; Ali & McWhirter, 2006; Bennett, 2008; Tang & Russ, 2007).

SCCT (Lent et al., 1994) is an application of Bandura's (1986) social cognitive theory to educational and career development. SCCT proposes that students' educational and career interests are impacted by their beliefs in their ability to succeed in specific domains (i.e., self-efficacy beliefs) and by their expectations about the anticipated outcomes of pursuing that domain (i.e., outcome expectations). SCCT also considers the impact that environment, culture, and context have on how individuals make educational and career choices. Due to the distinctive features of the Appalachian culture, it is vital that contextual factors influencing the educational plans of rural Appalachian youth be explored (Ali & Saunders, 2009). The literature has identified a number of factors which influence rural students' educational plans and achievement, including the role of student's parents (King, 2012). While it is clear that parents of rural Appalachian youth have an impact on college decision-making, the way in which parents influence this process has not been clearly established. By further exploring rural Appalachian youth and the role that parents play in the college decision-making process, findings can better inform how helping professionals work with this population.

Parental Influence on College-Going

Family influence is a powerful factor affecting students' decisions to attend college (King, 2012). The National Postsecondary Education Cooperative (2007) proposed that parents play the strongest role in the college decision-making process of traditional aged college seeking students. Research supports this assertion by demonstrating the impact that parents can have on various college-going outcomes, specifically in disadvantaged populations, such as students from

low-income, low-education households (An, 2010; Engberg & Allen, 2011; Engberg & Wolniak, 2010; Hallett & Griffen, 2015; Sandefur, Meir, & Campbell, 2006; Wang, 2014). For example, two studies found that first-generation college students perceived their parents to be the main source of support throughout their college planning process (Hallett & Griffen, 2015; Wang, 2014). Furthermore, first-generation students who feel supported by their parents demonstrate an increased interest in and expectation to attend college along with a higher likelihood of college enrollment (Hallett & Griffen, 2015; Perna & Titus, 2005). Wadenya and Lopez (2008) found that low-income students of color are more likely to be admitted into college when their parents are involved in postsecondary planning. Finally, Wang (2014) surmised that parental support could ease the college transition for first-generation students and increase the probability of student success. As demonstrated by these studies, there are multiple facets of parental influence on college-going including the level of parental involvement and parental support.

While parental involvement can positively impact the college-going process as demonstrated above, many students also report receiving mixed messages from their parents about college-going (Gofen, 2009; Wang, 2012, 2014; Yolanda, Greenfield, & Burgos-Cienfuegos, 2015). These mixed messages from parents are especially salient in families where parents have low levels of education (Stephens et al., 2015). As a result, an additional aspect of parental influence that has recently received growing attention is the level of agreement between parents and adolescents regarding their educational and career decisions (Sawitri, Creed, & Zimmer-Gembeck, 2012). Research indicates that when parents and adolescents agree on future plans, career development is more positive and when disagreement occurs career development can be impeded (Leung, Hou, Gati, & Li, 2011). Parental support can have many positive outcomes on students' futures; however, the literature suggests that the benefit of parental

influence depends on whether or not adolescents view their parents' influence as supportive and congruent with their own views (Garcia, Restubog, Toledano, Tolentino, & Rafferti, 2012). Considerable research has investigated the role of parental influence on college-going; however, limited literature explores the impact of adolescent-parent congruence on college decisions. In addition, no research on this topic exists with rural Appalachian students despite their strong value of family and the fact that this group of students has the lowest college-going rates in general (National Student Clearinghouse [NCS], 2015).

While Appalachian students often come from low-income, low-education households, they represent a distinct cultural group with unique characteristics setting them apart from other disadvantaged populations. This indicates that research on rural Appalachian students might provide a different view on the impact that adolescent-parent congruence has on the constructs of college going self-efficacy, college outcome expectations, and college decision-making. Because individuals from rural Appalachia represent a unique cultural group, it is important that the characteristics of this region be clearly identified and understood.

Rural Appalachia

The Appalachian region is a 205,000 square-mile region stretching from southern New York to northern Mississippi, and is home to more than 25 million Americans (Appalachian Regional Commission [ARC], 2016). Almost half of the region is comprised of a highly rural population (42%), more than double that of the national population (ARC, 2016). High levels of economic distress characterize rural Appalachia, with 22.5% of persons living in poverty and unemployment rates much higher than the national average (Pollard & Jacobsen, 2013). The Appalachian region is also characterized by distinctive values that distinguish them from the majority culture (Bennett, 2008). Appalachia is considered an individualistic subcollectivist

culture, denoting that individuals from this region traditionally adopt collectivist values while living within an individualistic society (Bennett, 2008; Gore et al., 2011). Collectivist Appalachian values include a strong connection to family, responsibility to family, an attachment to place, and a strong sense of religion (Gore et al., 2011; Tang & Russ, 2007; Sprang et al., 2013). Other characteristics of the culture include strong values of equality in which being “better” than others is looked down upon and independence in which individuals prefer to be in control (Tang & Russ, 2007). Combined, the region’s economic concerns and cultural values have the potential to impact the educational attainment of Appalachian residents in a variety of ways.

Overall, residents in rural Appalachia attain low levels of education, with only 22.2% of adults holding a bachelor’s degree or higher compared with the national average of 29.3% (Pollard & Jacobsen, 2016). The trouble with such a small percentage of adults holding a college degree is that adolescents in this area often have few college-going role models, decreased support for college, and less information about how to pursue a postsecondary education (Ali & Saunders, 2006). Due to a growing national need for more individuals to hold a postsecondary degree, a main priority of the Appalachian region is to increase the number of students who obtain a postsecondary education in order to develop an educated workforce that accommodates the changing landscape of the future (Regional Educational Laboratory Appalachia, 2016). The hope is that by increasing the number of residents obtaining a postsecondary education, the region can begin to work toward alleviating their economic distress by decreasing unemployment rates and subsequent poverty (Regional Educational Laboratory Appalachia, 2016).

Rural Appalachian Youth

Despite this priority, adolescents living in rural Appalachia remain a population that confronts many barriers in their educational and career development (Tang & Russ, 2007), and rates of college attendance in rural Appalachia remain low (ARC, 2016). Rural Appalachian students encounter barriers such as limited educational opportunities, a lack of financial resources, a lack of college knowledge, and a lack of support as they pursue a postsecondary education (Ali & Saunders, 2009; Bryan & Simmons, 2009; Gore et al., 2011; Hand & Payne, 2008). An additional challenge, suggested by the small number of adults with college degrees, is that many students' parents have no formal education beyond high school, making a large number of students prospective first-generation college students (Bradbury & Mather, 2009; Chenoweth & Galliher, 2004). Parents with low levels of educational attainment often have limited knowledge about postsecondary education and face many hurdles as they try to assist their children through the complex process of college planning (Hallett & Griffen, 2015; King, 2012; Perna & Titus, 2005).

Although parents in rural Appalachia may lack knowledge about higher education, family appears to be one of the most important contextual factors in Appalachian student's educational development (Bryan & Simmons, 2009; Bennett, 2008). The value that students place on family in rural Appalachia has the potential to serve as both a resource and barrier for rural Appalachian students during their college decision-making process (Bennett, 2008). For example, students may rely heavily on their parents and families for support and assistance throughout college planning (Ali & Saunders, 2006). This reliance can be a resource when, as Brown et al. (2009) found, families provide positive and consistent educational support for rural Appalachian youth during college planning. Alternatively, family reliance could become a barrier if students rely

only on their families for college planning assistance and families are unfamiliar with higher education (Ali & Saunders, 2009). Family influence could also become a barrier when messages from parents conflict with the pursuit of a postsecondary education. Students may receive messages from their parents about the importance of supporting their family instead of focusing on educational advancement making it difficult to set goals of pursuing college (Tang & Russ, 2007). Hendrickson (2012) found that many rural Appalachian students experience tension between their parents who are promoting responsibility to family and vocational work and their schools which are promoting the pursuit of college. This tension between family values and college going demonstrates one type of cultural-values conflict that many rural Appalachian youth face in their college decision-making.

In addition to the value of family, other rural Appalachian values also have the potential to create tension and impact the educational plans of rural Appalachian youth. The strong sense of localism, or association to place, in Appalachian communities may sway students to remain close to home rather than moving away for educational pursuits (Wright, 2012). Howley (2006) found that rural youth's attachment to place had a significant limiting impact on their postsecondary plans. The Appalachian values of independence and self-reliance may be a resource for rural Appalachian youth when pursuing postsecondary education or a barrier if they are unwilling to seek support from others (Ali & Saunders, 2006). Therefore, in addition to facing various barriers, rural Appalachian youth must also contend with cultural-value conflicts that can impact their educational plans (Bennett, 2008; King, 2012). Students are often faced with the dilemma of maintaining the cultural values of remaining connected to family and close to home or leaving their communities to pursue postsecondary education (Bryan & Simmons, 2009). Dilemmas such as this have the potential to create incongruence between parents and

adolescents about their postsecondary decisions; however, no studies have examined the construct of adolescent-parent congruence in college decision making with the rural Appalachian population.

The existing research with this population regarding the impact of parental influence on college decisions produced mixed results. For example, Ali and McWhirter (2006) concluded that rural Appalachian students' perceptions of parental support were not predictive of their educational aspirations. Consistent with these findings, Ali and Saunders (2009) found that parental support was not significantly associated with the career aspirations of rural Appalachian students. Alternatively, other research (Ali & Saunders, 2006) suggested that high levels of parental support were associated with high levels of educational self-efficacy and could therefore impact Appalachian students' educational plans. Similarly, Chenoweth and Galliher (2004) found that parental variables including parent education level and parent occupational status predicted the college aspirations of rural Appalachian youth. The conflicting research results may be explained by the conflicting messages rural Appalachian students' report receiving from their parents regarding college-going. Bradbury and Mather (2009) found that for first-generation rural Appalachian students, family was a complicated factor in their transition to college, at times an important support and at other times a burden. The conflicting findings and mixed messages many students report receiving highlight the importance of additional research on this topic with the rural Appalachian population. The literature also suggests that more research is needed which examines how contextual resources or barriers, such as parental influence, impact college decisions among rural Appalachian youth (Ali & Saunders, 2006). Social Cognitive Career Theory (SCCT; Lent et al., 1994) is theoretical framework used to understand students' educational and career decision making which directly takes into account environmental supports

and barriers, culture, and context. Therefore, working to understand how the contextual variable of adolescent-parent congruence impacts the college decision-making process of rural Appalachian youth is best examined through the lens of SCCT.

Social Cognitive Career Theory

Based on Bandura's (1986) social cognitive theory, Social Cognitive Career Theory (Lent et al., 1994) describes how individuals make educational and career decisions. SCCT works to explain how individuals develop educational and career interests, make choices based on these interests, and achieve varying levels of educational and career performance (Niles & Harris-Bowlsbey, 2008). In SCCT, educational interests, goals, and actions are influenced by one's self-efficacy beliefs and outcome expectations (Brown & Lent, 1996). Self-efficacy beliefs are the beliefs that people have about their ability to accomplish a certain task, while outcome expectations are individuals' assumptions about the benefit of completing that task (Bandura, 1986). SCCT proposes that people become interested in, choose to pursue, and perform better at activities in which they have strong self-efficacy beliefs and accurate outcome expectations, as long as they have the necessary skills and environmental supports. Difficulties in educational and career development occur when individuals foreclose potential options based on inaccurate self-efficacy beliefs or outcome expectations, and when individuals stop pursuing a path due to the perception of barriers (Brown & Lent, 1996).

An individual's self-efficacy beliefs and outcome expectations are impacted by various environmental variables (i.e., supports and barriers) that occur during the educational and career decision-making process. The focus that SCCT places on the impact that context and environment have on educational development is one the theory's greatest strengths (Tang & Russ, 2007). A key assumption of SCCT is that students are more likely to pursue their goals and

take action if they perceive that few barriers and sufficient support from their environment will accompany their choices (Lent, 2005). Lent, Brown, and Hackett (2000) suggested that contextual barriers and supports could be one of the most powerful factors on educational and career decisions. As such, supports and barriers from a student's environment have the potential to impact and even alter their educational decisions (Bennett, 2008).

The SCCT model has been widely used when exploring the educational and career development of disadvantaged populations as it connects students' academic and career interests while also considering their environment and background (e.g., Ali, McWhirter, & Chronister, 2005; Gibbons & Borders, 2010). SCCT places more emphasis than traditional career theories on how environment influences educational development, which is especially important for disadvantaged populations (Bennett, 2008). Furthermore, the literature provides support for the use of SCCT when working to understand the postsecondary development of rural Appalachian youth (Ali & Saunders, 2006; Ali & Saunders, 2009; Ali & McWhirter, 2006; Bennett, 2008; Tang & Russ, 2007). For example, Ali and Saunders (2009) found the SCCT variables of self-efficacy and outcome expectations to be a strong predictor of educational aspirations among rural Appalachian youth. As such, SCCT is particularly applicable to rural Appalachian youth because of its emphasis on contextual affordances, which impact the self-efficacy beliefs and outcome expectations of students and in turn influence their college decisions (Bennett, 2008). This study seeks to add to the literature on SCCT through the following described constructs.

SCCT Constructs

Self-efficacy is a domain specific construct; therefore, a student's college-going self-efficacy beliefs are distinct from other educational beliefs and must be assessed separately. Researchers have recently begun to examine students' college going self-efficacy beliefs and

their relationship with contextual affordances (Gibbons & Borders, 2010). Gonzalez, Stein, Kiang, and Cupito (2014) found college-going self-efficacy beliefs in Latino adolescents to be greatly influenced by support from their peers. Gonzalez, Stein and Huq (2012) identified a positive correlation between college-going self-efficacy and students' resilience to barriers. Finally, Jensen (2013) found that early college access intervention programs increased college-going self-efficacy beliefs in rural fifth grade students. These findings provide support for focusing on the connection between college-going self-efficacy beliefs, contextual affordances, and college decision-making.

SCCT also proposes that outcome expectations are often associated with and influenced by self-efficacy beliefs (Lent, Brown, & Hackett, 1994). Assessing the construct of college outcome expectations in addition to college-going self-efficacy may provide further insight into students' beliefs about the value of pursuing a college education. Raque-Bogdan and Lucas (2016) indicated the important role that both college-going self-efficacy and college outcome expectations have on the educational and career development of disadvantaged populations. The researchers found that college-going self-efficacy and college outcome expectations were predictive of student's career aspirations. Based on findings such as this, the need for exploring both self-efficacy beliefs and outcome expectations concurrently seems clear.

Both college-going self-efficacy and college outcome expectations are impacted by a student's contextual affordances. Contextual affordances are subject to interpretation by the student as being either a support or a barrier (Lent et al., 2000). While there are many supports and barriers that can impact student's college decision-making process, this study will explore the contextual affordance of adolescent-parent congruence. Within the SCCT model, parental influence is viewed as a contextual influence that has the potential to serve as both a barrier and

support on student's educational and career development (Lent et al., 2000). The negotiable nature of supports and barriers suggests that the intended effect of parental influence will only be achieved if students perceive their parents behaviors as being supportive and congruent with their own. This supports the need for exploring the level of adolescent-parent congruence and the impact that this contextual affordance has on rural Appalachian youth. For this study, the construct of adolescent-parent congruence, as a facet of parental influence, will be explored regarding its impact on the SCCT variables of college going self-efficacy beliefs, college outcome expectations, and the college-going decisions of rural Appalachian youth.

Statement of the Problem

Rural Appalachian youth are an underserved population that face extreme challenges in their educational and career development. Appalachian students experience significant barriers as they consider a postsecondary education, while also attempting to navigate the cultural values of their Appalachian background. The value of and responsibility to family are strongly held in rural Appalachian communities and are a contextual affordance that have the potential to impact students' college-going self-efficacy, college outcome expectations, and postsecondary decisions.

Limited research exists investigating the educational development of rural Appalachian youth, despite the fact that this is a disadvantaged population with significant educational needs (Ali & Saunders, 2009). There is even less research which examines the role of parental influence on college decision-making despite the value of family in rural Appalachian communities and the low levels of educational attainment in the region. The research that does exist on this topic has produced conflicting findings, necessitating further research on the impact that parents have on the college decision making process of rural Appalachian youth. Due to the

mixed findings and mixed messages students report receiving from parents, this study explored the construct by researching one aspect of parental support, adolescent-parent congruence. Focusing on adolescent-parent congruence is especially important as Appalachian students are often faced with dilemmas between cultural values and postsecondary plans, which have potential to create disagreement between parents and adolescents about their educational goals and decisions. SCCT considers the impact of context and environment on a student's postsecondary plans and recognizes the influence that parents can play in this process.

Purpose of the Study

The purpose of the present study was to explore the relationship between adolescent-parent congruence on the SCCT variables of college-going self-efficacy beliefs, college outcome expectations, and college decision-making in rural Appalachian youth. This research examined parental influence by investigating one aspect of parental influence, adolescent-parent congruence. No research has explored how adolescent-parent congruence relates to the SCCT variables of college-going self-efficacy, college outcome expectations, or postsecondary decisions of rural Appalachian youth. This study provides additional information and insight into how the parent-adolescent relationship impacts college-going in rural Appalachian populations. This research can also assist helping professionals who work with rural Appalachian youth (e.g. school counselors, school social workers, teachers, administrators) and their parents in terms of college and career planning. Ultimately, this research expands our knowledge of the SCCT theoretical orientation and the rural Appalachian population as a whole.

Research Questions

1. What are the typical levels of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?

- a. What are the differences by gender, parent education level, and postsecondary plans on adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?
 - b. What are the relationships between adolescent-parent congruence, college-going self-efficacy, and college outcome expectations?
2. How are college-going decisions impacted by the level of adolescent-parent congruence, college-going self-efficacy beliefs, and college outcome expectations of rural Appalachian youth?
3. How do rural Appalachian high school students say that adolescent-parent congruence impacts their college decisions?

Definition of Terms

- Appalachia: The 205,000 square mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi (ARC, 2016).
- Adolescent-parent congruence: Perceived compatibility and similarity between adolescents and their parents regarding college going exploration, plans, and goals (Sawitri et al., 2012).
- College-going self-efficacy: One's belief about his or her ability to attend and persist in college (Gibbons & Borders, 2010).
- College outcome expectations: One's expectations about the anticipated outcomes for receiving a college education (Flores, Navarro, & DeWitz, 2008).
- Contextual affordances: Proximal environmental variables that can moderate or directly impact the way in which an individual makes and implements educational and career decisions (Lent et al., 2000).

Delimitations

The boundaries of the study are based on the population. The population of participants were students from five rural Appalachian high schools in a single Appalachian state, and as such does not represent the Appalachian region as a whole. Also, students surveyed were enrolled in the spring semester of their senior year of high school. Therefore, the population is limited to students who have persisted to this level in their educational achievement and does not include students who dropped out or chose to earn a high school equivalency diploma. Finally, students surveyed were 18 years of age or older, and so does not represent the high school senior population as a whole.

Limitations

There are several limitations with this study which warrant discussion. First, the generalizability of these findings is limited. Due to the delimitations of the population, the results are limited to the population which was studied. Caution should be taken in generalizing findings to other rural communities because of the unique cultural context of the Appalachian region. Second, this study is not experimental thus no casual inferences can be made and the results may have been influenced by confounding variables. Finally, the data collected is based on self-report by participants; therefore, responses could be impacted by factors such as social desirability and errors in self-observation.

Organization of the Study

In Chapter One, the identified problem and purpose of this study has been defined. The population of rural Appalachian youth has been described along with the theoretical framework for this study, Social Cognitive Career Theory. Major terms have been identified as well as the delimitations and limitations of the research. In Chapter Two, the relevant literature will be

reviewed. Chapter Three describes the research methodology, design, and data analysis plan.

Chapter Four provides results from the analyses conducted. Finally, in Chapter Five, a discussion of the results, limitations, and implications are presented.

Chapter 2

Review of Literature

This chapter reviews the literature relevant to the current study. The first section provides a historical perspective on the changing landscape of postsecondary education. A second section reviews literature regarding parental influence on college-going. Next, research on rural Appalachia is explored which includes information about Appalachian culture, education in rural Appalachian, and rural Appalachian youth and families. Additionally, the literature on Social Cognitive Career Theory and the specific constructs of college-going self-efficacy, college outcome expectations, and adolescent-parent congruence are reviewed.

Historical Perspectives on Higher Education

The landscape of higher education has changed substantially over the past sixty years, specifically in terms of the number of students attending college along with the characteristics of college students (Brock, 2010). Prior to the 1940s, few individuals pursued a college education as a college degree was not necessary to earn a sufficient living (Brock, 2010). The total enrollment in U.S. colleges and universities in 1940 was approximately 1.5 million students (ACE, 1984). Additionally, the elite generally attended colleges and universities, who were white males from middle to upper class families during this time (Thelin, 2011). Significant changes began in 1940 when a main focus of public policy and legislation became transitioning higher education from the elite to mass higher education (Thelin, 2011).

The most significant piece of legislation came in 1944 when President Roosevelt signed the federal G.I. bill into law which covered the cost of college for veterans of World War II. This legislation provided many young men returning from war the opportunity to attend college, and by 1950 college enrollment had grown to almost 2.7 million (ACE, 1984). Students utilizing the

G.I. bill were often non-traditional college students, unlike the students who had historically filled college campuses. Many of these new college students were men who were the first in their family to attend college, were married, had children, were disabled veterans, and/or were older than the traditional college age (Thelin, 2011). While the G.I. bill significantly expanded access to college, colleges continued to be filled with a majority white male student body with minorities and women significantly underrepresented (Brock, 2010).

The mid 1960's marked another major turning point in higher education with the passage of the Higher Education Act of 1965, which opened up higher education to many more students (Brock, 2011). Prior to this legislation, financial aid was not available for college students unless they were military veterans. The Higher Education Act of 1965 extended need-based financial aid to general college students fueling increases in college attendance. Furthermore, the Civil Rights Act of 1964 prevented discrimination based on race in schools and mandated equal opportunities for women. By 1970, the total college enrollment had reached over 7.9 million students (ACE, 1984).

The impact that these pieces of legislation had on college attendance is clearly evidenced by the dramatic rises in college enrollment. Enrollment numbers continue to steadily rise, reaching approximately 20.5 million students in 2016 (NCES, 2016). Along with higher enrollment, the demographics of students also have changed, with more women, racial and ethnic minorities, and students over the age of 24 attending college (Snyder, Dillow, & Hoffman, 2007). The continued rise in enrollment can be attributed in part to these historical pieces of legislation as well as the increased value of obtaining a postsecondary degree.

Earning a postsecondary education is being increasingly seen as an important step toward acquiring steady and secure long-term employment; a large portion of future careers will require

some type of postsecondary degree (NCES, 2015). In addition, lower levels of educational attainment correlate with higher percentages of unemployment and lower earnings (NCES, 2015). Specifically, unemployment rates for individuals with only a high school diploma are twice the level when compared to those with a bachelor's degree (Bureau of Labor Statistics, 2015). The significance of earning a postsecondary degree is clear; however, educational disparities continue to exist among minority students and those from low socioeconomic backgrounds (Engberg & Allen, 2011). Engberg and Wolniak (2010) described these disparities in postsecondary education, stating, "Despite the progress we have made toward providing greater access to all students, our educational system continues to reproduce the social and economic inequalities that reflect that stratified nature of American society" (p. 133). While access to college improved significantly over the past sixty years, many individuals from disadvantaged backgrounds continue to be vastly underrepresented in higher education. These levels of underrepresentation are problematic due to the increased need and importance of a postsecondary education. The disparities in higher education that continue to exist indicate that more work in the area of college access is needed.

Parental Influence on College-Going

In an effort to address these disparities, researchers sought to understand how students decide to pursue a postsecondary education and what factors influence student decision-making (Bozick & DeLuca, 2011). It is important that we understand what impacts student's decision to attend or not attend college before we implement college access interventions (Ali & McWhirter, 2006). One major influencing factor that has received significant attention is how parents facilitate the educational attainment of their children (Sandefur et al., 2006). Fann, Jarsky, and

McDonough (2009) classified parental influence as possibly the most important source of influence on students' educational goals.

Family Capital

Much of the research conducted on family influence has its roots in the fields of sociology and education (Ali & Saunders, 2009; Bozick & Deluca, 2011). Within sociology, scholars utilize decades of longitudinal data collection, including studies such as the Educational Longitudinal Study (ELS, 2002), the National Educational Longitudinal Study (NELS, 1988), and the National Household Education Survey (NHES, 2012) to research parental influence on college going. Much of this research concentrates on how aspects of family capital the educational attainment of students. In research using large longitudinal databases, various aspects of family capital are often explored in a single study. Family capital typically includes the constructs of parental education, family income, and family structure or size (An, 2010; Engberg & Allen, 2011; Sandefur et al., 2006).

ELS (2002). The ELS was a federally funded research project designed to explore students' transition from secondary school into postsecondary education or the workforce. The study developers surveyed a nationally representative sample of students during their sophomore year of high school (2002), their senior year of high school (2004), and again two years post graduation (2006). The initial sample included over 16,000 students from over 750 high schools (ELS, 2002). The ELS also includes information from students' parents, teachers, and administrators, providing various perspectives on factors influencing students' transition from secondary school.

Engberg and Allen (2011) utilized data from the ELS (2002) to research how background characteristics such as parent education level impacted the likelihood of low-income students'

college enrollment. The researchers used a specific sample of low-income students from the ELS who completed the follow-up study two years after their high school graduation. Constructs examined included parent education level, parental involvement, and college-linking networks. Engberg and Allen (2011) found low levels of parent education, characterized by having a high school diploma or less, were associated with the highest levels of no college enrollment for students. The opposite was found for parents with a bachelor's degree or higher. Specifically, students whose parents had a bachelors degree or higher were 70% and 90% more likely to attend a two- or four-year college, respectively, rather than not enrolling when compared to students whose parents had a high school diploma or less (Engberg & Allen, 2011). Parent education level appears to play a strong role in explaining the college enrollment of students.

Additional results from Engberg and Allen (2011) included findings regarding parental involvement. Four-year college-bound students reported more parental involvement, more parental encouragement, and the most frequent number conversations with parents about college compared to two-year college-bound students or students not planning to attend college. Also, low-income students who were attending a four-year college had more proximal influences such as peers, family members, coaches, and college representatives encouraging postsecondary education (Engberg & Allen, 2011). It seems that parental involvement as well as the involvement of other supports promotes college going, especially enrollment in a four-year institution.

In other research, An (2010) also used the ELS to explore how family background characteristics impacted whether students applied to college as well as the selectivity of where they applied. A selective college was defined as a highly competitive institution. An's (2010) sample contained data from the initial sample of high school sophomores and the first follow-up

during students' senior year of high school. Dependent variables included whether a student applied to college and the selectivity of those colleges. Independent variables included constructs such as race, parent education level, family income, family size, and parent-student discussions about college admissions tests. The researcher found that parent education level strongly influenced students' decision to attend or not attend college. Furthermore, results showed that parent education level was positively associated with the selectivity of where students applied to college. A student with at least one parent who had earned a bachelor's degree or higher had a 3.8% greater probability of applying to a selective college than students whose parents earned less than a bachelor's degree (An, 2010). Family income was also positively associated with the probability of students applying to college; however, family income was not associated with applying to a selective college. An (2010) also found both family structure and size influenced a student's decision to apply to college; however, they were not associated with where a student applied. Finally, parent-student discussions regarding plans to take college admissions tests were positively related to college selectivity. Ultimately, parent education level appears to impact both if students apply to college and the type of college to which they apply. On the other hand, family income, family structure, and family size only impacted if students applied to college at all and discussions about college admissions tests only impacted college selectivity.

Additional research by Engberg and Wolniak (2010) explored how family income variables and family involvement impacted attendance to two-year and four-year colleges using data from the ELS study. The researchers used data from students' senior year of high school and two years post-graduation, which produced a sample of 11,940 students. Results showed that as socioeconomic status increased, students were significantly more likely to attend a two-year or four-year college. They also found that as parents became increasingly concerned with college

costs and the accessibility of financial aid, the likelihood of students attending a four-year college decreased significantly (Engberg & Wolniak, 2010). Regarding family involvement, results indicated that the availability of parental networks and the aspirations of family for the student to attend college greatly impacted college enrollment. These findings suggest that socioeconomic status as well as parental concern about financing college can negatively impact college enrollment. They also suggest that parental involvement and support has a positive impact on college enrollment.

NELS (1988). The NELS (1988) is another nationally representative longitudinal survey that explored educational processes and outcomes. The study began with a sample of eighth-grade students in 1988. These students were then reassessed through four follow-up surveys in 1990, 1992, 1994, and 2000. Topics within the surveys included home environment, school experiences, educational resources and support, and educational aspirations.

Sandefur et al. (2006) conducted an extensive study using data from the NELS with over 13,000 respondents. The researchers specifically explored the influence of parent education level, family income, family size, and family involvement on the probability of students enrolling in different types of postsecondary institutions. They found that higher parent education level increased the probability of students attending a four-year college and decreased the probability that students would not enroll in any post-secondary education. Results showed students whose parents attended graduate school had a 19% higher likelihood of enrolling in a four-year college than students whose parents had only a high school degree. Parent education level had a weaker relationship with students attending a two-year degree program (Sandefur et al., 2006).

Sandefur et al. (2006) also found strong relationships between family income and postsecondary institution selection. Results showed that high family income levels were related to higher probabilities of attending a four-year college. Similarly, low family income levels were related to higher probabilities of choosing no postsecondary education (Sandefur et al., 2006). Furthermore, Sandefur and colleagues found family size to be associated with postsecondary institution type, with larger families associated with lower probabilities of attending a four-year college. This suggests that attending a four-year college requires a significant family investment which may be more difficult for larger families.

Finally, Sandefur et al. (2006) explored how levels of parental involvement impacted the probability of students enrolling in different types of postsecondary institutions. They found that parental involvement in school activities, contact with schools regarding academics, discussions about school activities with their students, and high expectations each increased the likelihood of students attending college (Sandefur et al., 2006). While these different types of parental involvement were not as influential on college attendance as parent education level and family income, they are likely more malleable in student's lives than parent education and income. Clear differences exist in college attendance between students whose parents have only a high school diploma and those with a college education. It seems that higher parent education levels lead to higher education attendance by students.

McCarron and Inkelas (2006) used data from the NELS to examine if parental involvement had a significant influence on the educational aspirations of first-generation students as compared to their non-first generation counterparts. The study gathered data from 1,879 first-generation college students working toward degrees at two- or four-year colleges along with a comparative sample of non-first-generation students. The researchers found a

positive relationship between parental involvement and educational aspirations in both first-generation and non-first-generation students. For first-generation students, 5.9% of the variance in educational aspirations was explained by parental involvement compared with 5.2% of the variance for non-first-generation students. Although parental involvement emerged as a slight predictor of educational aspirations, much of the variance was left unexplained. The authors suggested that the gaps in variance could be attributed to the way in which parental involvement was operationalized (McCarron & Inkelas, 2006). However, the gaps in variance appear to suggest that parental involvement only has a slight influence on students' educational aspirations.

Researchers also used NELS data to explore how family influences college attendance and educational aspirations, as demonstrated by the previous studies, as well as how family influences college retention. Ishitani and Snider (2002) examined data from the NELS to explore the effects of college preparation programs and student background characteristics such as parent education level and family income on college retention. The sample in this study included 4,445 first-time freshman college students. Results regarding parental influence on retention found that lower parent education levels negatively impacted students' retention. Specifically, students with no college educated parent were 82% more likely to drop out of college, and students with only one college-educated parent were 40% more likely to drop out of college than students with two college-educated parents. Lower levels of family income were also found to increase the likelihood of student drop out. Students from families with an annual income of \$19,999 or less were 1.27 times more likely to drop out than students from families with an annual income over \$50,000. Regarding parental involvement, students who had frequent discussions with their parents about college planning were less likely to drop out (22%) during their first two years of

college (Ishitani & Snider, 2002). Furthermore, when parents and teachers were in contact about college going, students were 14% less likely to drop out than students whose parents had not consulted with teachers. These findings suggest that parental education level and family income are both positively associated with the likelihood of drop out; however, parental involvement as demonstrated through college discussions with their student and student's teachers can decrease the likelihood of student drop out. Furthermore, results show that parental influence extends beyond college planning into college retention.

Each of these studies clearly demonstrates that parents do influence the college-going process. Findings seem to concur that aspects of family capital, including low parent education levels and low family income, decrease students' likelihood of college attendance and retention. Researchers also agree that family capital through parental involvement can have a positive impact on students' college-going behaviors. It seems evident that family is influential in the college-going process and that familial demographic characteristics create increased complexities in college enrollment and attendance. These conclusions suggest that students whose parents have lower levels of family capital may be at a stark disadvantage compared to their peers with more family capital. As such, additional research has further explored parental influence with disadvantaged students in an effort to understand how parents influence college-going in these populations. First-generation college students are one large group of disadvantaged students which has received attention in the literature.

Parental Influence with First-Generation College Students

Clear educational disparities exist between first-generation college students and those whose parents completed education beyond high school, leaving first-generation students underrepresented in higher education (Baum & Ma, 2007; Engle & Tinto, 2008; Lohfink &

Paulsen, 2005; Tate, Fouad, Marks, Young, Guzman, & Williams, 2015). First-generation college students frequently come from low-income backgrounds and are disproportionately students from marginalized racial and ethnic groups, such as students from rural Appalachia (Engle & Tinto, 2008). First-generation students are often academically unprepared for postsecondary education and have lower college grade point averages compared to their non first-generation counterparts (Martinez, Sher, Krull, & Wood, 2009). They also tend to report lower educational aspirations, expect lower levels of educational attainment, and have higher needs for mentoring and support (Has-Vaughn, 2004). Finally, first-generation college students often face significant barriers when pursuing a postsecondary education as their parents have limited knowledge of or experience with college (Tate et al., 2015).

Due to the lack of parental experience with postsecondary education, parental influence on first-generation college students is a frequently researched topic. Literature on both first-generation college students and prospective first-generation college students will be explored. For this review, first-generation college students refers to students already enrolled in college whose parents have no formal postsecondary degree. The term prospective first-generation college students refers to middle and high school students planning to attend college whose parents have no formal postsecondary education.

First-generation college students. Within the literature exploring parental influence with first-generation college students, two main themes have emerged from the research. The first theme is that parents seem to provide support; however, the type of support that parents of first-generation college students provide is not the same as parents of non first-generation students. Secondly, it seems that many first-generation college students receive mixed messages

from their parents regarding their pursuit of a college education. The sections below represent the current empirical literature of these concepts.

General versus concrete support. Nicholas and Islas (2016) explored differences between first-generation and non first-generation premedical students' academic outcomes and social capital during the first year of college. Social capital included students' parents and families. The researchers used three forms of data collection, including survey, interview, and academic transcript analysis. Nicholas and Islas (2016) first surveyed 21 first-generation college students and 23 continuing-generation college students, exploring background characteristics and the amount of social capital they possessed. Next, interviews were conducted with participants about their well-being and relationships after the completion of students' first quarter. Finally, the researchers reviewed student grades and GPAs from their academic transcripts. Results from student interviews revealed significant differences between first-generation and continuing-generation students in the types of parental involvement they reported. All students shared that their parents provided emotional and instrumental support to help them succeed in college. However, first-generation students indicated that emotional support was the main type of support they received from their parents while continuing generation students reported receiving specific types of help from parents such as assistance choosing classes, buying textbooks, and how to take exams (Nicholas & Islas, 2016). Additionally, first-generation students reported lower levels of career-specific social capital which included receiving less help from parents with their college applications, knowing fewer people with a college degree, and having a lower likelihood of knowing a medical doctor. Finally, although students entered college with similar academic preparation, at the end of the first year, first-generation students had lower grades and were less likely to stay on the premedical track than their continuing-generation peers (Nicholas & Islas,

2016). These results suggest that first-generation students often receive emotional support from parents, but lack specific assistance to support their preparation for or transition to college.

Moschetti and Hudley (2015) found similar results in their study which looked at how first-generation, working-class, white students integrated into the college setting. The researchers conducted a qualitative study in which they completed semi-structured interviews with 20 first-generation students. During the interviews, students were asked about how they managed their transition to college, what networks were available to assist them, and what their future plans were at the time. One of the main themes that emerged from these interviews was a theme of family support. Participants described that their parents had little knowledge about college so they could not provide any concrete support during their transition to college (Moschetti & Hudley, 2015). Furthermore, students shared that their families often encouraged them to be independent in order to be successful in college and did not promote seeking support from institutional resources. Overall, the support that first-generation students received from their parents appeared to be limited to social and emotional support. In addition, it seems that parents of first-generation students promoted independence rather than help-seeking behaviors for students' success.

Tate et al. (2015) also took a qualitative approach to explore first-generation college students' beliefs about what influenced their career development process. The researchers conducted focus group interviews to collect data from fifteen participants. During the interviews, participants were asked about their beliefs regarding their career development. Three major themes emerged from the data including external influences on career development, understanding the career development process, and self-concept. Within the theme of external influences on career development, family influence was the largest category. As part of this

category, participants shared the suggestions, concerns, and pressures they received from their parents about their career path. Participants often described receiving a lot of support from their parents for their pursuit of college and a college degree. However, participants also noted that their parents had a lack of concrete knowledge about how to pursue postsecondary education and specific careers. In addition, participants discussed witnessing their parents struggle financially and being dissatisfied with their jobs which seemed to be a motivating factor for many to pursue college. Students shared that their parents promoted the need to work hard and earn their own way (Tate et al., 2015). These messages seemed to contribute to students' self-concept as first-generation college students. Students often viewed themselves as persistent and motivated, appreciative, self-reliant, responsible, and adaptable. In conclusion, these results provide further evidence that parents often provide general support to students; however, they struggle to provide specific support in the college and career process. Additionally, the results suggest that family influence appeared to impact students' positive self-concept as a first-generation college student.

In another qualitative study, Neumeister and Rinker (2006) explored how gifted first-generation college females perceived their ability, gender, and other factors as influencing their achievement. Four participants were included in the study. Each participant was interviewed twice, with interviews lasting approximately 1.5 hours. Participants shared that their high abilities provided them with opportunities and exposure to resources and supports which were critical to their college achievement. The participants reported that these supports were so important because their parents often did not encourage postsecondary education. Furthermore, when parents did provide encouragement they were unable to give specific advice or assistance because of their limited experience with higher education. Interviews also revealed that

participants felt that their personal characteristics of independence and work ethic contributed to their achievement. All participants felt that these characteristics came from being raised in a working-class family (Neumeister & Rinker, 2006). Results indicated that families of gifted, female first-generation college students lacked knowledge about college-going; however, families instilled characteristics of independence and work ethic which students perceived as contributing to their success.

In summary, it seems that family positively influences the college going process for first-generation college students by providing general emotional support. It is also clear that the majority of these families are unable to provide active support through concrete assistance with college-going activities due to their lack of experience. Finally, many families of first-generation college students influence students' self-concept promoting personal characteristics of independence, self-reliance, and work ethic.

Mixed messages. Additional research on parental influence with first-generation college students signifies that these students are also receiving mixed messages from their parents about postsecondary education. Wang (2012) used a qualitative approach to explore messages that first-generation college students received from on-campus mentors about the role that college and family should play in their lives. The researcher conducted 30 semi-structured interviews with first-generation college students in which they were asked about these memorable messages. Results revealed three memorable message themes regarding family including: comparing and contrasting, counting on family, and recognizing the importance of family. Within the first theme, students expressed comparing their own families with their mentors' families. Some wanted better family relationships than their mentors while others wanted family relationships like their mentors. The second theme revealed that students received messages from

their mentors suggesting they could count on their families for advice and support throughout college. The final theme included that students should remember their roots, appreciate and respect their families, and be a role model their families could be proud of (Wang, 2012).

While many messages described in the Wang (2012) study were encouraging, some proved to be contradictory. For example, mentors suggested that students should put their full focus on school while also communicating that students should find a balance with family and friends. Students also expressed conflicting feelings between self-reliance and seeking help. Many first-generation students were willing to talk to mentors about academic issues; however, they were reluctant to share about personal or family difficulties. Finally, some first-generation students struggled with the competing discourses related to home and college. Students expressed difficulty merging these two aspects of their lives and often felt that they had to choose one aspect over the other (Wang, 2012). Overall, these findings suggest that first-generation students received many messages from their on-campus mentors about what role family should play in college. Some of these messages were encouraging and supportive while others created uncertainty and confusion in students about the roles of home versus school.

In a similar study, Wang (2014) conducted additional qualitative research to examine the memorable messages that first-generation students received from their parents about the role family should play in college. The research included 30 interviews with current first-generation college students at a large Midwestern public university. Wang (2014) asked participants to describe and explain the memorable messages they heard from their parents about college. Five memorable message themes were identified including: remembering family, focusing on family, counting on family, not worrying about family, and setting a good example. Students received messages about not forgetting where they came from and making sure that family remains

present in their lives once in college. This often created disagreement, causing students to feel like they had to make decisions about prioritizing family or school. In addition, many students shared they could count on their families for help managing the difficulties that they faced in college. Messages received regarding not worrying about family seemed to encourage students to focus on their new role as a college student. Despite this message, many students still had a difficult time being away from home. Many of the students shared wanting to return home after college to be with their families again. Throughout the interviews, family was identified as an instrumental factor in the lives and decisions of many first-generation college students (Wang, 2014). First-generation college students seemed to place high value on the messages they received from parents although they saw some messages as supportive, some as not supportive, and others as confusing.

In another qualitative study, Gofen (2009) conducted in-depth interviews with 50 first-generation college students about how they were successful as college students when their parents had not attended college. Each interview began with the following questions: “Many people with your starting point did not achieve higher education. How do you explain your success? What is the formula?” (p. 108). Three main subcategories were identified including: 1) parent’s attitudes toward their child’s education, 2) parent’s attitudes toward their own education, and 3) daily actions prioritizing education. Each category included themes that described student experiences. Within the first theme, some students experienced their parents’ views of their own education as a dream come true while others viewed the education as a way out of poverty. The second theme included some students who saw their parents as role models despite not having an education while others viewed parents as an example of what not to do. Finally, the third theme included different ways in which parents made education a priority including being involved,

putting education before everything else, and punishing students when schoolwork was not done. Some of the ways students described their families' influence appeared conflicting. For example, many students shared that their parents did not want the student to end up them while parents also promoted family solidarity. These results demonstrate that the ways in which first-generation students perceive their families' influence on their success can vary greatly. Gofen's (2009) findings also suggest that families of first-generation students who make education a priority may be an important resource and increase student success.

Yolanda et al. (2015) researched how first-generation Latino college students experience home-school value conflicts during their transition to college. The researchers took a qualitative approach in which 18 students were given a conflict scenario and asked to respond to the scenario in writing. A group interview took place after the students responded to the scenario. All students in the study reported experiences of home-value conflicts. Students discussed five main types of home-school conflicts including: attending family events vs. doing academic work, visiting family vs. doing academic work, and assisting family vs. focusing on one's academics, putting money toward travel to see family vs. putting money toward educational expenses, and homesickness. Students reported conflict differently based on the distance college was from their families (Yolanda et al., 2015). These themes demonstrated that there are many home-school value conflicts that Latino first-generation students experience between their collectivist family values and the individualistic values of postsecondary education. The results also show that home-school value conflicts can have a negative impact on students' perceptions of their well-being and their academic success. The findings from this study point to the existence of home-school value conflicts and their negative influence in students from collectivist cultures. This is especially salient for any cultural group that embodies collectivist beliefs.

Stephens et al. (2012) also studied the ways in which cultural values can create challenges for students from interdependent cultures, as most postsecondary institutions promote independent norms. The researchers considered first-generation college students through a cultural mismatch theory and explored how messages of independence from universities were in direct opposition to messages from students' family culture. Four related studies were completed with college administrators and students to investigate university culture, student cultural norms, and cultural match or mismatch for first-generation students and non first-generation students. When asked about reasons for attending college, results showed that first-generation students chose twice as many interdependent motives for attending college compared to their non first-generation peers. First-generation students chose motives such as being able to help their families after college, bring honor to their families, give back to their communities, and provide a better life for their own children. Results also showed that when universities ascribed to independent norms, negative effects on learning occurred for first-generation college students. Furthermore, the majority of college administrators described their college culture using norms of independence (Stephens et al., 2015). This study demonstrates that first-generation students may be receiving messages of independent cultural norms from their universities that do not match the interdependent cultural norms of their homes.

Overall, many first-generation students appear to receive incongruent messages from and about their families role in their postsecondary education (Wang, 2012). It seems that parents often express messages of support for their child's pursuit of college while also communicating that students should prioritize their family and not forget where they came from (Gofen, 2009; Wang, 2014). Furthermore, first-generation students frequently report receiving conflicting messages from their colleges and their family culture (Yolanda et al., 2015). Universities are

communicating values of independence while many students' cultures communicate values of interdependence (Stephens et al., 2012). Ultimately, these mixed messages often create confusion and tension in students once enrolled in college; however, less is known about how mixed parental messages influence first-generation students' prior to college enrollment.

Prospective first-generation college students. Some researchers have considered family influence on college-going specifically with prospective first-generation college students; however, this research is limited. Gibbons and Borders (2010) investigated the college-going expectations of middle school students who were prospective first-generation college students compared to their non first-generation peers. The researchers took a quantitative approach and surveyed 272 seventh grade students and their parents. The constructs explored included college-going self-efficacy, perceived barriers to college going, parent and school personnel support, college-going outcome expectations, and demographic variables. Gibbons and Borders (2010) found that prospective first-generation college students reported less parental support for their education than non first-generation students. Prospective first-generation students also reported perceiving more barriers to college including a lack of college going role models, a lack of planning guidance, and family issues. Furthermore, results showed that parental support had a positive relationship with negative outcomes expectations, suggesting that students may be receiving mixed messages from parents about college going (Gibbons & Borders, 2010). From this research, it appears that mixed messages from parents and a lack of concrete support exist as early as middle school for prospective first-generation college students.

Gibbons, Borders, Wiles, Stephan, and Davis (2006) examined the career and college plans of 9th grade students. The researchers gathered data from 222 students regarding their career and college needs and 218 parents regarding their involvement and concerns about college

and career planning. Results showed notable differences between prospective first-generation college students and non first-generation students. Prospective first-generation students rated themselves lower academically compared to their peers. Additionally, fewer prospective first-generation students had chosen a college preparatory track in their course of study (52.7%) unlike the majority of non-first generation students (75.9%). These students also differed in their plans after high school. For example, 14.8% of students had no idea if their parents wanted them to attend college versus 3% of non first-generation students, and 18.4% planned to go straight into the work force after high school compared to 1.3% of non-first generation students (Gibbons et al., 2006). Responses from parents showed that finances, grades, and making good choices were their biggest concerns related to their students' college and career planning. Furthermore, although parents reported providing general encouragement about college and career planning, there seemed to be limited active support provided. For example, few parents reported researching schools with their student, going on a college visit, or starting a college savings plan. These findings first indicate that clear differences exist in the postsecondary plans of prospective first-generation students compared to non-first generation students as early as ninth grade. In addition, it seems that parents of prospective first-generation college students are providing general support for college and career planning, but are often not always providing active or accurate assistance.

Grodsky and Jones (2007) revealed similar findings in their study of how socioeconomic background impacts parents' knowledge of the cost of going to college. Parent education level was used as a measure of socioeconomic background in the study. The researchers used data from the National Household Education Survey (1999; NEHS) which included responses from 6,872 parents who had a child between 6th and 12th grades. Grodsky and Jones (2007) found that

socioeconomically disadvantaged parents were less likely to provide an estimate of college tuition to their students than more advantaged parents. As parent education level increased, the likelihood of parents providing an estimate of college tuition also increased. Similarly, African American and Hispanic parents were less likely to provide an estimate of college tuition to their students than white parents. When parents did provide an estimate, they often substantially overestimated the cost of college. On average, parents overestimated the cost of college by 175% of the actual cost (Grodsky & Jones, 2007). Although not specific to prospective first-generation students, this research suggests that parents of disadvantaged students, often lack accurate information about college-going, which could lead their students to prematurely foreclose on pursuing a postsecondary education.

The limited research on parental influence with prospective first-generation college students indicates that parents provide general rather than active support for college (Gibbons et al., 2006), have limited or inaccurate knowledge about postsecondary education (Grodsky & Jones, 2007), and communicate mixed messages to their students about college-going (Gibbons & Borders, 2010). These findings regarding parental influence with prospective first-generation college students mirror those with current first-generation college students. Overall, parents with no college education seem to lack concrete knowledge about postsecondary education and communicate incongruent messages to their children about postsecondary education. While it is clear that the lack of knowledge and communication of mixed messages exists, it is unclear how these experiences impact students' college-going process. In addition, the literature suggests that cultural values may play a role in the types of parental messages that are being communicated (Stephens et al., 2012; Yolanda et al., 2015), yet limited research exists with specific cultural groups. Of the research that does exist with specific populations, most has focused on minority

groups which are visibly different from the majority culture, such as African Americans, Hispanic Americans, and Asian Americans (Tang & Russ, 2007). Minimal research has explored Appalachian Americans despite them being a distinct cultural minority group (Ali & Saunders, 2009). Appalachian Americans have been characterized as an “invisible minority” because their outward appearance is not visibly different from the majority culture in mainstream America (Tang & Russ, 2007). In addition, the Appalachian region is a large area in which there are high levels of poverty and low levels of postsecondary attainment (Appalachian Regional Commission, 2014). Therefore, most students in this region pursuing a postsecondary education would be first-generation college students. This is also a region that holds strong cultural values of family as well as values of independence and self-reliance, suggesting that parental messages about postsecondary education may play a unique role with this population (Brown et al., 2010). Ultimately, the lack of attention and high levels of need in the Appalachian region speak to the need for further research and attention in this area.

Rural Appalachia

The Appalachian region includes 420 counties across 13 states and is home to more than 25 million Americans (Appalachian Regional Commission, 2016). Thirty-seven percent of the Appalachian region is considered rural or nonmetro area (Pollard & Jacobsen, 2016). As previously mentioned, residents from the Appalachian region have lower levels of educational attainment, higher unemployment rates, and higher poverty rates when compared to the rest of the nation. These disparities are even more pronounced in rural areas. Pollard and Jacobsen (2016) recently prepared an overview of the Appalachian Region for the Appalachian Regional Commission demonstrating these disparities between 2010-2014. Their findings indicated that 24% of working-age adults in the Appalachian region held a bachelor’s degree or higher in 2010-

2014; however, in rural Appalachian counties not adjacent to metro areas only 16% held a bachelor's degree or higher. In addition, 73% of individuals in Appalachia ages 25-64 years were employed in the civilian labor force, which is just slightly below the national average of 78%. Conversely, in rural Appalachian counties only 65% of working-age adults were employed in the labor force (Pollard & Jacobsen, 2016). Finally, the median household income in rural Appalachian areas was \$35,475 between 2010-2014 compared to the national average of \$74,596. This indicates that 22.7% of rural Appalachian individuals are living in poverty compared a national average of 15.6% (Pollard & Jacobsen, 2016). These stark statistics indicate significant disparities between rural Appalachia and the nation as a whole. They also demonstrate that rural Appalachian youth are more likely to come from families with low SES backgrounds and are more likely to be the first in their families to enter postsecondary education. Furthermore, the findings point to a clear connection between educational attainment, unemployment, and poverty in rural Appalachian areas. While rural Appalachia faces significant economic problems, it is also a region with strong cultural values. There is a danger to categorize Appalachia as an inferior culture because of these economic difficulties; however, Appalachia is full of rich cultural heritage which must be understood in its own terms (Keefe, 2005).

Cultural Values

As previously stated, the Appalachian region holds strong cultural values that are distinctive from those held by the majority culture (Bennett, 2008). Appalachia is considered an individualistic subcollectivist culture, which adopts collectivist values while living within a majority culture built on individualistic values (Bennett, 2008; Gore et al., 2011). Because of the distinct culture, an individual's identity in Appalachia is a product of the collective and should not be viewed apart from it (Wagner, 2005). Core Appalachian values that are central to the

culture and shape Appalachian identity include familism, localism, a religious worldview, egalitarianism, and independence (Gore et al., 2011; Keefe, 2005; Tang & Russ, 2007; Sprang et al., 2013). Familism is characterized by the needs of family taking precedence over individual needs while localism is characterized by a strong responsibility and attachment to place (Keefe, 2005). The durable values of family, place, and religion likely developed out of Appalachia's historical isolation from mainstream culture due to its rural location, which are often difficult to access from larger cities (Tang & Russ, 2007). Individuals living in rural Appalachia were often dependent upon their families, communities, and churches for survival and support (Tang & Russ, 2007). This isolation also likely strengthened the values of independence and self-reliance and contributed to Appalachian's mistrust of outsiders as there was limited assistance given from anyone outside of the region (Drake, 2001). Finally, the value of egalitarianism is a commonly held value in collectivist cultures characterized by individuals viewing one another as equal indicating that being seen as superior to others is undesirable (Keefe, 2005).

The distinctive cultural values of the Appalachia region influence individuals' view of postsecondary education. Gore et al. (2011) demonstrated this in a study which explored the influence of Appalachian collectivist cultural values on students' academic attitudes. Academic attitudes were measured by assessing students' academic self-efficacy, school connectedness, and fear of academic success. Just over 600 college students participated in the study, of which 133 were from the Appalachia region and 472 were from non-Appalachian regions. Seventy percent of the Appalachian participants described their hometown as rural. Findings indicated a stronger association between collectivism and academic attitudes in Appalachian students than non-Appalachian students. For example, Appalachian students had stronger connections with their academic environments while reporting more ambivalence about academic success (Gore et

al, 2011). These findings suggest that Appalachian student attitudes toward education are influenced by their cultural environments.

Education

Based on these findings, it is clear that views toward postsecondary education in Appalachia are shaped by the cultural values which characterize the region. Keefe and Greene (2005) described this view of education by stating, “Appalachians value getting an education and making a good living, as long as it is achieved with honesty, modesty, and a continued appreciation of family and the homeplace” (p. 301). In other words, education can be suitable as long as cultural values are not abandoned in its pursuit. This path, however, can be difficult to achieve as the pursuit of a postsecondary education can conflict with cultural values of the region. For example, the pursuit of a postsecondary education may require students to move away from the community which conflicts with values of localism and familism (Bryan & Simmons, 2009). From the perspective of rural parents, higher education can seem like a way to improve their child’s economic opportunities while also removing their child from their rural home (Eller, 2008). As such many students may be told that they should leave their community in order to find a good job and make a decent living while also being told to maintain strong connections to family and place (Fisher & Smith, 2012). Furthermore, the many prospective first-generation students in rural Appalachia may need support and assistance when pursuing a postsecondary education which conflicts with the values of independence and self-reliance (Ali & Saunders, 2006). Clearly, rural Appalachian youth must contend with cultural-value conflicts that can impact their views of education.

These conflicts are demonstrated in a study by Hendrickson (2012) which examined reasons that rural Appalachian students resist schooling and engagement in education. In this

qualitative project, the researcher first conducted classroom observations to identify resistant students. These students were then invited to take part in an interview where they were asked about their behaviors in class and their future plans. Results revealed three themes regarding why students may be resistant to education including family values and expectations, relevance of the schooling they were receiving, and misunderstandings with teachers. The first theme highlighted incongruence between school values promoting college attendance and home values promoting family and localism. Many students reported that their families did not know about or encourage college, and some shared that their families encouraged work that did not require a college degree. Participants also shared feeling like the content they were learning was not applicable to the real world, creating misunderstandings between students and their teachers (Hendrickson, 2012). Students shared feeling misunderstood by their teachers which created disengagement in the classroom. Overall, the tensions students faced between home and school values seemed to create resistance to education in some rural Appalachian youth.

Researchers have also considered the impact of specific cultural values on postsecondary education. Wright (2012) took a qualitative approach to explore how the Appalachian value of localism informed and shaped rural Appalachian students' postsecondary and career decisions. Participants were current students at a community and technical college in rural Appalachia. Students interviewed included both individuals who wanted to remain local and those who wanted to leave the area after receiving their degree. The researcher interviewed 30 students and asked them about their postsecondary plans and how they would use their degree. Student responses revealed the dichotomies and tensions they face. Students discussed the benefits of postsecondary education in their community including its intimacy, safety, affordability, and closeness to home. Others shared a desire to leave the region due to a lack of jobs and economic

resources in their communities. Finally, results revealed that some students were pursuing a college degree in an effort to end the problems in their families and communities (Wright, 2012). Findings suggest that some rural Appalachian students pursue college to move out of the area while others are committed to using their degree toward improving and transforming their families and local communities.

Rural Appalachian Youth and Families

Rural Appalachian youth face various challenges as they pursue a postsecondary education. As demonstrated above, rural Appalachian youth are more likely to come from low SES families and be a first-generation college student. Furthermore, these students are navigating the cultural values of their Appalachian families and communities as they pursue a postsecondary education. While little research has been conducted specifically with rural Appalachian youth and families, some studies produced findings related to postsecondary education. This section outlines research with rural Appalachian youth and families on their postsecondary expectations, aspirations, attainment, and experiences.

Postsecondary expectations and aspirations. Ali and Saunders (2006) examined how social cognitive factors such as parental support contributed to the college expectations of rural Appalachian youth. They examined the impact of parental support, parent education level, and educational and vocational self-efficacy on college expectations. College expectations were measured by asking students how likely they were to complete a four-year degree and then how likely they were to complete a four-year degree plus an advanced degree. Participants included 87 tenth and eleventh grade rural Appalachian high school students. Findings revealed that students' perceptions of parental support and self-efficacy beliefs both predicted their expectation to attend college. Specifically, 36.5% of the variance in college expectations was

accounted for by parental support and vocational/educational self-efficacy (Ali & Saunders, 2006). In addition, parent education level did not predict college expectations. Findings indicate that perceptions of parental support were more influential than parent education level suggesting that when rural Appalachian students perceive their parents as supportive, they are more likely to expect to attend college. These findings also provide support for the influence of social cognitive contextual variables on the college expectations of rural Appalachian youth.

Chenoweth and Galliher (2004) explored the similar construct of college aspirations with rural Appalachian youth. College aspirations provided more specific information about students' plans after high school and were measured by assessing students' post-high school plans (e.g., four-year college, two-year college, military, technical school, straight to work). The researchers investigated factors that influenced students' decisions to attend college. Factors explored included academic achievement along with peer, family, and financial factors related to college-going. Participants in this quantitative study included 242 high school students. Results showed that family, peers, school environment, cultural influences, and individual characteristics all impacted students' postsecondary decisions. Academic factors, including grades and participation in college preparatory classes, were the strongest predictors of college enrollment. Parental variables including parent education level and parent occupational status were also important predictors of college aspirations in rural Appalachian youth. Specifically, lower parent education levels and lower status parental professions predicted lower college aspirations. The researchers also found gender differences regarding how students decided to pursue college, with males more influenced by their family and peers while females were more influenced by their individual academic preparation (Chenoweth & Galliher, 2004). Ultimately, it seems that

parental variables are influential factors in the college aspirations of rural Appalachian youth, and they may be an even stronger influence for male students.

Ali and McWhirter (2006) also examined the postsecondary aspirations of rural Appalachian youth. Specifically, they examined the relationship between postsecondary aspirations and various social cognitive factors including parental support among rural Appalachian students. Participants included 338 eleventh grade students from rural Appalachian high schools. Findings indicated that college outcome expectations and educational/vocational self-efficacy were the strongest predictors of postsecondary aspirations. Students with college aspirations had higher levels of educational self-efficacy and college outcome expectations than students whose aspirations were to go straight to work after high school. In addition students' aspiring to bachelor's degrees or perceived a lower likelihood of encountering barriers to postsecondary education than students aspiring to a vocational degree, two-year degree, or going straight to work (Ali & McWhirter, 2006). Unlike findings from the previous studies, parental support was not found to be a significant factor in distinguishing between aspiration groups. These findings suggest that parent support levels toward postsecondary education may be similar for rural Appalachian students, regardless of their educational aspirations.

Postsecondary attainment. Other research has considered how family influences the postsecondary attainment of rural Appalachian youth. For example, Brown et al. (2009) examined how the families and communities of rural Appalachian youth impacted their postsecondary goals and attainment. The researchers drew data from 200 participants in the Great Smokey Mountain Study (GSMS; 1996), a longitudinal study of families and health in Appalachia. Constructs explored included family context, community context, educational goals, and educational attainment. Results showed that parent education level and family income were

both positively associated with students' educational attainment. In addition, youth living in areas with fewer college educated role models had lower educational goals. Rural youth faced marginalization, economic deprivation, and psychosocial risks in their pursuit of college. In contrast, findings also suggested that families and communities in Appalachia may be the strongest pathways for providing resources and support to help students achieve educational milestones (Brown et al., 2009). Ultimately, while rural Appalachian students faced significant familial barriers to college-going, family and community supports seemed to also positively influence the postsecondary goals and attainment of these youth.

Byun, Meece, and Irvin (2012) also considered family influence on the postsecondary attainment of rural youth. They used longitudinal data to examine disparities in postsecondary enrollment and degree completion between rural and nonrural students. The researchers explored the constructs of SES, family composition and resources, community resources, and academic preparation by analyzing data from 9,540 students. Results revealed that rural students had parents with lower levels of educational attainment and lower family income. Rural students were less likely to come from two-parent homes, less likely to discuss academics with their parents, and were less likely to enroll and graduate from college. On the other hand, rural students reported more family and community resources which appeared to benefit their likelihood of degree attainment (Byun et al., 2012). Although not specific to Appalachia, these findings suggest that rural students face numerous barriers to postsecondary education resulting in lower rates of college attainment; however, they often have higher rates of family and community resources which may benefit students by slightly increasing the likelihood of college degree attainment.

Due to the low educational attainment in rural Appalachia, some intervention programs aim to at increase college-going in rural Appalachian youth. King (2012) examined the perspectives of 11 leaders of grant-support projects funded by the Appalachian Higher Education Network. The goal of each project was to increase the college-going rate of high school students in rural Appalachian counties. Project leaders were asked to share what factors had the greatest and least impact on college-going and what parental and community participation was like in their programs. Leaders reported college visits and college entrance exam preparation had the greatest impact on college-going rates while there was no consensus regarding what factor had the least impact (King, 2012). In addition, leaders reported parental involvement was important for their rural students and noted the effectiveness of providing workshops for parents regarding financial aid and college going. Providing college-going interventions and including parents in these programs seems to be effective at increasing the college-going rates of rural Appalachian youth.

Postsecondary experiences. Some qualitative studies have focused on the experiences of rural Appalachian students once enrolled in college and the role that family played in their experience. Bradbury and Mather (2009) used a qualitative approach to explore the experiences of rural Appalachian students who were also first-generation college students. The researchers specifically studied students' academic, social, and interpersonal experiences as they transitioned to college using interviews with nine students during their first semester of college. Findings showed four themes that affected students' transition including the pull of home, academic adjustment, belonging, and financial realities. The majority of students expressed a desire to remain close to their families emotionally and geographically. They also shared struggling to balance the demands of college with the demands of their families. Many students reported that

time spent with family and working prevented them from participating and engaging on campus. Finally, students desired to improve their economic situation while also remaining close in location to their family (Bradbury & Mather, 2009). It seems that for first-generation rural Appalachian students, family was a complicated factor in their transition to college, at times an important support and at other times a burden.

In another qualitative study of first-generation college students from rural Appalachia, Bryan and Simmons (2009) focused on the experiences and family related factors that students attributed to their success in college. Five female and five male first-generation students from Appalachian Kentucky were interviewed in this study. In the researchers' analysis, identified themes included close-knit families and communities, separate identities, college-going knowledge, pressure to succeed, and returning home. Bryan and Simmons (2009) found that students described struggling to become actively involved in their universities while remaining connected to their families which often created separate identities. Students shared feeling like one person at school and a different person at home. In addition, many of their families had limited knowledge about college yet all of the participants reported feeling overwhelming pressure to succeed for their families. For some, the pressure was to return home after completing college. Ultimately, these findings highlight students' struggle to maintain their family relationships while investing in the college setting, and reveal that this struggle can result in overwhelming pressure and the development of separate identities.

Hand and Payne (2008) also explored the experiences of first-generation college students from rural Appalachia and the factors they attributed to their success. The researchers conducted a qualitative study in which they interviewed nine rural Appalachian students. Interviewers asked students about their decision to attend college, their success in college, and the significance of

being Appalachian. Results revealed themes of the importance of home and family, financial concerns, internal locus of control, relational support, and the communication of information. Students discussed struggling between independence and commitment to their families. Many felt supported by their families to attend college, but some felt alienated. The majority of students shared feeling like they were fulfilling a dream of their parents to end up more financially secure than their parents. Students also reported that finances and a lack of information were both barriers to their pursuit of college while support from family, other relationships, and their independence contributed to their success (Hand & Payne, 2008). Overall, students viewed their families and communities as both a barrier and support for their postsecondary success.

The limited research regarding family influence in the college-going process of rural Appalachian youth indicates that this population faces compound challenges in pursuing a postsecondary education. To begin, rural Appalachian youth are more likely to come from low SES backgrounds and be first-generation college students (Pollard & Jacobsen, 2016). They face various barriers to college including a lack of college knowledge, limited finances, and marginalization resulting in lower rates of college attainment (Brown et al., 2000; Byun et al., 2012). In addition to these challenges, rural Appalachian youth are often faced with cultural-values conflicts creating further struggles in their college-going process. This population places significant importance on their families, as demonstrated by their strong values of familism and localism. These values seem to provide support at times and strain at other times. For example, perceptions of parental support positively impacted the college expectations and attainment of rural Appalachian youth (Ali & Saunders, 2006; Brown et al., 2009). Family support appeared to be more influential for rural Appalachian males than females (Chenoweth & Galliher, 2004). On

the other hand, Ali and McWhirter (2006) found that parental support had no impact on the college aspirations of rural Appalachian youth. It seems that there are conflicting findings on the role of parental support in the college-going process of rural Appalachian youth.

Qualitative findings provide additional information by describing the complex role of parental involvement with this population. When rural Appalachian youth shared about their experiences in college, they often described an intense struggle and tension between remaining connected to family and close to home or spending time investing in college and leaving their communities to pursue postsecondary education (Bradbury & Mather, 2009; Hand & Payne, 2008). They report feeling as if the incongruence between their family values and the values of higher education led to the development two different identities, one at their college and one at home (Bryan & Simmons, 2009). While it is clear that cultural-values conflicts between rural Appalachian students and their families exist, less is known about the impact of this incongruence and if tensions between students and parents exist prior to their enrollment in college.

If rural Appalachian youth experience cultural-values conflicts between their families and higher education as high school students, it may impact their likelihood of pursuing a postsecondary education. In addition, incongruence could impact the college-going self-efficacy beliefs and college outcome expectations of rural Appalachian youth. These cultural-values conflicts have the potential to create incongruence between parents and adolescents about their postsecondary decisions; however, no studies have examined the construct of adolescent-parent congruence in college-decision making process of rural Appalachian youth.

Social Cognitive Career Theory

Social Cognitive Career Theory (Lent et al., 1994) provides a framework to understand how individuals develop educational and career interests, make educational and career decisions, and achieve educational and career success. Although a relatively new theory, it has been widely researched and become a leading framework to guide practitioners and researchers in their understanding of educational and career behaviors (Flores, Navarro, & Ali, 2016). Data indicates that the original articles introducing and clarifying SCCT (Lent et al., 1994; Lent et al., 2000) have been cited over 4,500 times (Flores et al., 2016) in the literature.

Development and Overview

Historically, career theories focused on White, middle class males, with little acknowledgement given to diverse or lower SES populations (Richardson, 1993). Due to this gap in the career literature, researchers began to point to a need for the development of theories that addressed the influence of contextual factors on the career development of diverse individuals (Subich, 2001). More recent career theories such as SCCT attend to this deficit by making environment and context central figures to the theoretical framework. In addition, SCCT reflects two major trends in career theories according to Niles and Harris-Bowlsbey (2009). The first trend is that contemporary theories show an increased attention to the role of cognition within career and educational development. The second is an understanding that clients are active participants in their career development process and benefit from interventions that fit their personal values and beliefs.

Developed in 1994 by Robert W. Lent, Steven D. Brown, and Gail Hackett, SCCT was based upon Bandura's (1986) social cognitive theory. Specifically, the theory uses Bandura's (1986) triadic reciprocal model of causality, which suggests that an individual develops through

a reciprocal interaction of their personal attributes, environment, and behaviors. Lent et al. (1994) took Bandura's triadic reciprocal model and applied it to career and educational development. Following this model, SCCT indicates that an individual's career development occurs through a reciprocal interaction of self-efficacy beliefs, outcome expectations, and personal goals (Lent, 2005). Self-efficacy beliefs are domain specific beliefs that an individual holds about their ability to perform and succeed at a particular performance while outcome expectations refer to an individual's beliefs about the consequences of performing a certain behavior (Lent, 2005). Self-efficacy beliefs answer the question, "Can I do this?", while outcome expectations answer the question, "What will happen if I do this?". Regarding the domain of college-going, self-efficacy beliefs might answer an individual's question, "Can I go to and succeed in college?" and outcome expectations might answer, "What will be the outcome if I go to college?". Self-efficacy beliefs and outcome expectations help to determine career and educational interests, goals, and ultimately actions. For example, if an individual believes that success in college is possible and believes that a college degree will positively impact the future (i.e., higher paying job, career security), then they individual may be more inclined to become interested in and choose to pursue a college degree. SCCT also presumes that the types of learning experiences an individual is exposed to directly impact career related self-efficacy beliefs and outcome expectations. An individual's learning experiences are influenced by person inputs (e.g., gender, age, ethnicity) and background variables (e.g., parent education level, SES).

In addition, contextual influences play an important role in the career and educational choice processes of SCCT. Contextual factors can serve as a barrier or support for one's interests, goals, and choices; therefore, having the potential to moderate or directly impact an individual's career decision-making process (Lent et al., 2000). For example, people may be

more likely to pursue their goals and take action if they perceive limited barriers and sufficient support to follow this path (Lent, 2005). Examples of contextual influences include emotional support, financial means, and cultural conditions for pursuing a particular option (Lent, 2005). The impact of a contextual affordance depends on how individuals view the particular environmental variable, indicating that contextual influences are open to individual interpretation (Lent et al., 2000). In this study, the contextual influence of adolescent-parent congruence will be explored. The authors of SCCT provided a visual model to help display the connections between each SCCT variable. This model, including the constructs of focus in this study, are illustrated in Figure 1.

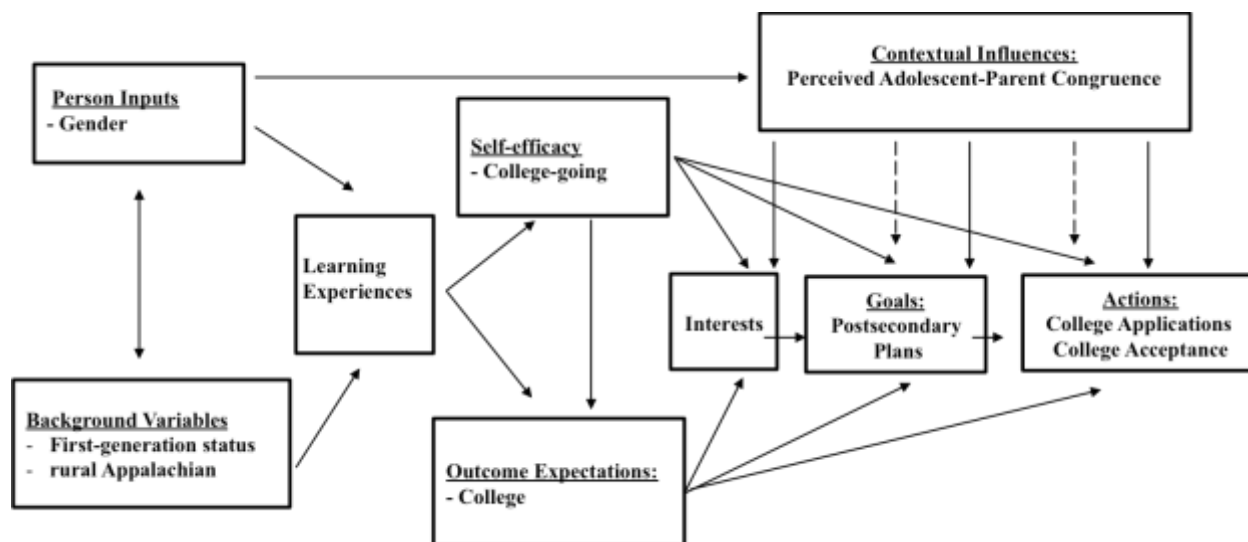


Figure 1. SCCT model including constructs to be examined in this study (Adapted from Lent, Brown, and Hackett, 1994).

Empirical Support for SCCT

SCCT has received significant attention in the literature in recent years including many of the studies previously cited in this chapter, providing ample sources of empirical support. The

model demonstrates efficacy in explaining the career and educational development of diverse populations including Hispanic/Latinos (Flores et al., 2008; Gonzalez et al., 2012; Ojeda, Flores, & Navarro, 2011), African Americans (Booth & Myers, 2011; Bullock-Yowell, Andrews, & Buzzetta, 2011) Asian Americans (Kelly, Gunsalus, & Gunsalus, 2009; Shen, 2015), students from collectivist cultures (Sawitri & Creed, 2016), prospective/first-generation college students (Gibbons & Borders, 2010; Raque-Bogdan & Lucas, 2016), and students from low SES backgrounds (Ali et al., 2005). It is clear that the SCCT model applies to diverse populations.

Due to large amounts of literature on this theory, meta-analytic reviews provide a useful way to integrate findings from many independent studies on SCCT. Several meta-analyses directly tested SCCT variables and strong support exists for the role of self-efficacy in educational and career decision-making. For example, recent meta-analyses found that self-efficacy beliefs are strongly related to academic goals (Brown, Lent, Telander, & Tramayne, 2011; Brown et al., 2008), college GPA, and college retention (Robbins et al., 2004). Similarly, Choi et al. (2012) found career decision self-efficacy was related to career outcome expectations, peer support, and self-esteem.

While fewer studies examined the construct of outcome expectations, several researchers provide support for its role as well. For example, college outcome expectations appear to be related to academic satisfaction (Ojeda et al., 2011) and predict students' career aspirations (Raque-Bogdan & Lucas, 2016). In addition, Ali et al. (2005) found that vocational outcome expectations of students from low SES backgrounds were predicted by their vocational self-efficacy beliefs. Other studies also demonstrated a strong relationship between outcome expectations and self-efficacy indicating the relatedness of these constructs (Ali & McWhirter,

2005; Gibbons & Borders, 2010). It seems that self-efficacy is the strongest predictor of outcome expectations (Flores et al., 2016).

Regarding the construct of contextual influences, various types of contextual factors exist in an individual's environment that may impact their educational and career choice process (Lent et al, 2000). Contextual influences can moderate the decision-making process by influencing the relationship between peoples' interests, goals, and actions. SCCT indicates that people are less likely to develop interests, turn their interests into goals, and take action in pursuing their goals if they perceive negative contextual influences, or barriers. On the other hand, if people perceive positive environmental influences, or supports, they are more likely to become interested in, develop goals, and choose to pursue their goals (Lent et al., 2000). Literature supports these pathways through findings demonstrating students' educational aspirations to be associated with perceived educational barriers (Gonzalez et al., 2012), perceived parental support (Ali & Saunders, 2006), and levels of acculturation (Flores et al., 2008).

Parental influence is one type of environmental factor that has received attention in the literature regarding its role in the educational decision making of adolescents. Findings regarding the role of parental influence have been mixed. For example, McCarron and Inkelas (2006) found parental involvement to be a strong predictor of educational aspirations while Ali et al. (2005) found that parental support did not predict students' educational self-efficacy. In many cases, the role of parental influence seems to operate with duality, serving as both barrier and support. This is demonstrated by the mixed messages many students report receiving from their parents regarding postsecondary education (Gofen, 2009, Stephens et al., 2012, Wang, 2012; 2014, Yolanda et al., 2015) and the conflicting research findings regarding the role of parental influence. The dual nature of parental influence, having the potential to serve as both a support

and barrier, suggests that parental influence will only be viewed as support if students perceive their parent's behaviors as supportive and congruent with their own. Therefore, an emerging construct to consider within SCCT is the environmental influence of adolescent-parent congruence.

SCCT and Rural Appalachian Youth

A few studies explored SCCT variables in rural Appalachian youth, the majority of which were previously discussed in this chapter. While small in number, these studies provide important support for the utility of SCCT in understanding the educational and career decision-making processes of rural Appalachian youth. Overall, the SCCT model is supported with this population.

Ali completed three studies with colleagues exploring SCCT variables in rural Appalachian youth. First, Ali and Saunders (2006) examined the utility of the theory by exploring SCCT variables that contributed to the college expectations of rural Appalachian youth. Hierarchical multiple regression demonstrated that SCCT variables successfully predicted students' college expectations. Specifically, the SCCT variables of educational self-efficacy and parental support had the strongest impact on students' expectations to attend college. Second, Ali and McWhirter (2006) explored the relationship between the postsecondary aspirations of rural Appalachian youth and SCCT variables including educational self-efficacy, college outcome expectations, perceived educational barriers, and environmental supports. Findings showed that educational self-efficacy, college outcome expectations, and the perception of barriers were the strongest predictors of postsecondary aspirations. None of the environmental supports in this study discriminated between postsecondary aspirations of students. Third, Ali and Saunders (2009) explored SCCT variables that contributed to the career aspirations of rural Appalachian

youth. Results from the hierarchical multiple regression revealed that 52% of the variance in students' career aspirations was accounted for by the SCCT variables of educational self-efficacy, career decision outcome expectations, and socioeconomic status. They also found that the environmental variables of peer, sibling, and parental support were not significant predictors of career aspirations in rural Appalachian youth. Together, these studies indicated the effectiveness of SCCT variables at predicting the college expectations, postsecondary aspirations, and career aspirations of rural Appalachian youth. The variables of educational self-efficacy and outcome expectations were the strongest predictors across studies while support variables, including parental support, produced mixed results.

The previous studies explored multiple SCCT variables with rural Appalachian youth, whereas Irving, Byun, Meece, Farmer, and Hutchins (2012) focused solely on the SCCT variable of educational barriers in rural youth in general. Participants included over 7,000 high school students from a large national survey. Results showed that African-American and Hispanic/Latino students from rural areas perceived more educational barriers. In addition, students whose parents had low levels of education or whose families experiencing economic hardships perceived more educational barriers (Irving et al., 2012). These findings indicate that rural students who are also people of color, from economically distressed backgrounds, or have parents with low levels of education may perceive additional barriers to postsecondary education.

These studies provide support for the major tenets of SCCT and its usefulness for understanding the educational development of rural Appalachian youth. The results are largely consistent with the SCCT model. Specifically, the constructs of self-efficacy, outcome expectations, and the perception of barriers appear to help explain the career and educational

development of rural Appalachian youth. The influence of environmental supports, including parental support, was less clear, indicating a need for further research of this construct.

This chapter provided a review of the literature pertaining to parental influence on postsecondary education, rural Appalachian youth, and SCCT. Overall, evidence suggests that parental influence is powerful in students' college-going process and that students from backgrounds with less family capital face additional barriers to postsecondary education. Students whose parents lack postsecondary experiences often receive general support for college but not concrete assistance. In addition, these students often receive mixed messages from parents about pursuing a college degree. Regarding the population of interest, rural Appalachian youth often come from homes with less family capital and many are prospective first-generation college students. These students hold unique culture values of family that often create culture-values conflicts between students' value of family and the pursuit of postsecondary education. These cultural-values conflicts may create incongruence between rural Appalachian students and their parents about the pursuit of college; however, little is known about how this incongruence impacts students' college-decisions. SCCT is an empirically supported theoretical framework that directly takes into account background variables such as SES, location and parent education level, plus contextual influences such as parental support levels for postsecondary education. Using this empirically-supported framework provides context for this study. The next chapter will address the methodology of the study.

Chapter 3

Method

The purpose of this chapter is to provide a detailed description of the research questions, participants, procedures, instrumentation, and data analysis used to complete the study. This study used a quantitative design to report relationships and interactions between the constructs of adolescent-parent congruence, college-going self-efficacy, college outcome expectations, and college decisions. While the quantitative design served as the primary portion of this research, supplementary qualitative responses were gathered to provide insight into the construct of adolescent-parent congruence.

Research Questions

1. What are the typical levels of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?
 - a. What are the differences by gender, parent education level, and postsecondary plans for adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?
 - b. What are the relationships between adolescent-parent congruence, college-going self-efficacy, and college outcome expectations?
2. How are college-going decisions impacted by the level of adolescent-parent congruence, college-going self-efficacy beliefs, and college outcome expectations of rural Appalachian youth?
3. How do rural Appalachian high school students say that adolescent-parent congruence impacts their college decisions?

Participants

Participants for this study included high school seniors who were enrolled in the second semester of their senior year and were 18 years of age or older. Participants were also enrolled in Appalachian high schools located in rural counties in Tennessee. Rural counties were chosen using Isserman's (2007) rural-urban designation typology. This typology designates a rural county as 1) the county having a population density of less than 500 people per square mile and 2) either 90% of the county population being in a rural area or the county having no urban areas with a population of 10,000 or more (Isserman, 2007). Fifty-two of Tennessee's 95 counties meet Isserman's (2007) designation of a rural county.

High schools were selected for this study using convenience sampling with schools where the researcher had existing contacts. Once the researcher gained approval to solicit participants from suitable schools, participants were contacted through their school's *Remind* app or data management system. These technologies are electronic communication tools allowing students to receive school announcements through text message, email, or smartphone notification. Each participating school utilized one of these technologies to communicate with students. The *Remind* app or data management system sent an electronic invitation to students 18 years of age or older that linked to the online survey. This research was limited to participants who were at least 18 years of age as these students were of legal age to consent for their own involvement in research.

The number of participants needed for this study was calculated using a power analysis with a power of .95, an alpha of .05, and an effect size of .15. It was found that a total of 138 participants were needed to detect this effect size. In an effort to increase generalizability, the researcher attempted to collect data from a larger sample. After survey distribution, 169 students

began the survey. Of those who began the survey, 138 resulted in useable survey responses due to failure to consent, not meeting the age requirement, or early termination. An additional 15 students completed only the adolescent-parent congruence scale while 8 completed only the adolescent-parent congruence scale and college outcome expectations scale before terminating. No demographic data was collected from these 23 students; therefore, demographic data was collected from 115 students. Response rate cannot be determined because the sampling method allowed schools to choose their method of survey distribution and send the survey independently should they choose.

Procedure

Survey distribution began after IRB approval was obtained from the University of Tennessee. Research data was collected electronically through use of an online survey system, Qualtrics. The Qualtrics survey was set up to anonymize all responses, removing any identifying information including IP address. School personnel at participating schools identified potential participants by indicating senior students 18 years of age or older. Potential participants then received a recruitment solicitation announcement containing a link to the survey through their school's Remind app or data management system. Each participating school chose their method of survey distribution. At two schools, a school counselor sent the survey link through their school's Remind app. At one school, the school counselor asked the researcher to send the link to eligible students through the school's Remind app. One school chose to have a senior teacher take the lead on survey distribution. This teacher sent the survey link to students via email and allowed students to take the survey during class. The final school asked the researcher to send the survey link via email to eligible students. The school counselor then asked senior teachers to allow students to take the survey during homeroom. The school counselor also asked the

researcher to come to the school to talk with him in person and talk with any teachers who had questions. An incentive for participation was provided in every recruitment announcement. The optional incentive entered students into a drawing for one of four \$25 Wal-Mart gift cards. Potential participants were informed that participation in the research was not required in order to participate in the drawing. Upon clicking the link to the survey, potential participants were directed to the study consent form where they selected either “Agree” or “Disagree” to indicate their consent to participate in the study. The consent form collected no identifying information. Within the consent form, potential participants were informed that if they did not wish to participate in the survey but wished to be entered into the drawing they may email the researcher to be entered.

Participants who gave consent were then directed to the study’s survey. Upon completion of the survey participants had the option to enter into the drawing by clicking an electronic link redirecting them to a secondary survey outside of the primary data collection instrument. The survey included a series of measures in the following order: 1) the Adolescent-Parent Career Congruence Scale-Revised (Sawitri et al., 2012), 2) two open-ended response questions, 3) the College Outcome Expectation Scale (Flores et al., 2008), 4) the College-Going Self-Efficacy Scale (Gibbons & Borders, 2010), and 5) a brief demographic scale. The survey included 80 total items and required approximately 15 - 20 minutes to complete. Survey data was stored in the secure, encrypted, password protected Qualtrics platform. The only researchers that had access to the data included the primary research and faculty advisor.

Instrumentation

Participants were asked to complete three scales: the Adolescent-Parent Career Congruence Scale-Revised (Sawitri et al., 2012), College Outcome Expectation Scale (Flores et

al., 2008), and the College-Going Self-Efficacy Scale (Gibbons & Borders, 2010). Participants were also asked to answer two open response questions and complete a brief demographic scale.

Adolescent-Parent Career Congruence Scale - Revised

Leung et al. (2011) found that agreement between parents and an adolescent regarding future plans leads to more positive career development while disagreement can impede career development. Sawitiri et al. (2012) developed the Adolescent-Parent Career Congruence Scale (See Appendix A) to measure this discrepancy between adolescents and their parents in the career domain. The scale includes 12 items and two subscales measuring complementary and supplementary congruence. Complementary congruence measures perceived compatibility between adolescents and their parents regarding the adolescent's career development while supplementary congruence measures perceived similarity between adolescents and their parents (Sawitri et al., 2012). When taking the scale, adolescents rate their agreement with the set of items using a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Sample questions include, "My parents support me in my career plans" and "My parents approve of the plans I am making for my future career". Higher scores indicate more perceived congruence.

The researchers developed the scale in multiple stages (Sawitri et al., 2012). First, they generated an initial pool of items using a review of the literature, focus groups, and input from content experts. The researchers piloted the initial scale with 550 Indonesian high school students. Item and exploratory factor analyses were used on the initial items, resulting in 12 items to be retained in the scale. Subsequently, confirmatory factor analyses validated the 12-item scale with a different sample of 512 Indonesian high school students. The Cronbach's alpha coefficients for the subscales were .83 for complementary congruence and .80 for supplementary

congruence. Cronbach's alpha for all 12 items of the scale was .87 (Sawitri et al., 2012).

Evidence for convergent validity was demonstrated by positive correlations between adolescent-parent career congruence and measures of parental support, living-up to parental expectations, and life satisfaction (Sawitri et al., 2012).

Follow up studies by Sawitri used the Adolescent-Parent Career Congruence scale to explore its impact on career goals, aspirations, and behaviors in Indonesian high school students (Sawitri & Creed, 2015; Sawitri, Creed, & Zimmer-Gembeck, 2014). Sawitri also explored the impact of adolescent-parent career congruence on SCCT variables in the collectivist culture of Indonesia (Sawitri & Creed, 2016). Findings highlighted the impact of adolescent-parent career congruence on the career decision-making self-efficacy, career goals, career aspirations, and career decisions of adolescents from collectivist cultures. These results indicate the impact of adolescent-parent congruence, specifically in collectivist cultures.

For the purposes of this study, the research focused on assessing adolescent-parent congruence in the college domain as opposed to the career domain. For this reason, the researcher sought permission from the first author of the original scale to replace the word "career" with the word "college" within the scale. Permission was granted and the word college was utilized in the scale for this study. The reliability alpha coefficient for the Adolescent-Parent Congruence Scale – Revised in the current study was $\alpha = 0.91$ indicating a high internal consistency.

Open-Response Questions

The researcher initially developed three open-response questions about the role of adolescent-parent congruence on students' college decisions. These questions included: 1) How has your family influenced your decisions about what you want to do after high school?; 2) What

are some ways in which your wishes and your family's wishes are different regarding your plans after high school?; 3) How have these differences impacted your decisions about what you want to do after high school? The three open-response questions were piloted with 20 rural Appalachian students to assess for clarity and responses received. After the initial pilot, the questions were revised and repiloted with an additional 20 students. The two revised open-response questions included: 1) Describe two ways that your parent(s) support you in your plans after high school; and 2) Describe two ways that your wishes and your parent(s) wishes are different regarding your plans after high school. The two revised open-response questions were included in the current study and placed after the Adolescent-Parent Career Congruence Scale – Revised (Sawitri et al., 2012) in order to group similar topics together so that the survey unfolds in a logical manner. In addition, these questions were placed at the beginning of the survey in an attempt to gain more thorough responses due to fatigue.

College Outcomes Expectations Scale (COE)

The College Outcomes Expectations Scale was developed by Flores et al. (2008) to assess students' beliefs about the value of pursuing a college degree (See Appendix B). The COE consists of 19 items answered using a 10-point Likert-type scale (1 – strongly disagree to 10 – strongly agree). Example of a scale item include, "If I get a college education, then my family will be pleased" and "If I get a college education, then I will be better able to achieve my future goals in life". Higher scores indicate higher college outcome expectations. The COE was created for use with high school students or college students.

Flores et al. (2013) developed items on the COE using Bandura's (1986) original definition of outcome expectations along with items from existing scales measuring related domains including career and math/science outcome expectations. Flores et al. (2008) chose

items from existing measures that were relevant to pursuing a college degree and adapted them for the population. To determine reliability and validity for the scale, the researchers surveyed 180 Mexican American college students and 89 Mexican American high school seniors. A Cronbach's alpha of .93 was found for the college student population and a Cronbach's alpha of .94 was found for the high school seniors indicating strong internal consistency reliability. Convergent validity was demonstrated as COE scores were positively related to college self-efficacy. In addition, divergent validity indicated that COE scores were not related to age, generation level, or social class.

The COE has been used with minority populations including Native American and Mexican American students. For example, Thompson (2012) used the COE to explore the relationship between career barriers and college outcome expectations for Native American students. Ojeda et al. (2011) included the COE in their examination of academic and life satisfaction in Mexican-American college students. Finally, Flores et al. (2013) used the COE when applying SCCT to the postsecondary goals of Mexican-American high school students. Findings from these studies produced mixed results. For example, Thompson (2012) found lower perceived social status and more experiences with classism was related to lower college outcome expectations. Similarly, Ojeda et al. (2011) found that college outcome expectations were positively related to Mexican-American students' academic satisfaction. On the other hand, Flores et al. (2013) found no relationship between college outcome expectations and Mexican-American students' educational expectations, aspirations, or level of acculturation. These mixed findings indicate a need for further investigation regarding the role of college outcome expectations in the college-going process of minority students.

For this study, the researcher gained permission from the first author of the original scale to change the item scaling from a 10-point scale to a 6-point scale. This change was sought due to the lack of clear labels for each point on the 10-point scale which can create ambiguity and lead participants to create their own meaning of the scale points (Smith, Wakely, DeKruif, & Swartz, 2003). In addition, Likert-scales with more than 6-point are discouraged as they lack reliability (Smith et al., 2003). Nemoto and Beglar (2014) recommend using 6-point Likert scales in educational research when possible as they create appropriate variance and increase precision. The COE in the current study had a high level of internal consistency ($\alpha = 0.95$).

College-Going Self-Efficacy Scale (CGSES)

Gibbons (2005) developed the CGSES to measure a student's beliefs in his or her ability to attend and persist in college (See Appendix C). The CGSES contains 30 items, 14 of which relate to college attendance and 16 of which relate to college persistence. An example of a scale item relating to college attendance includes, "I can find a way to pay for college". An example of a scale item relating to college persistence includes, "I could get my family to support my wish of finishing college". Responses are answered using a 4-point Likert-type scale ranging from 1 (not at all sure) to 4 (very sure). The score is determined by the sum total of all 30 items. Higher scores indicate higher levels of college-going self-efficacy (Gibbons & Borders, 2010).

The researchers developed the CGSES items based on an extensive literature review. Thirty-one items were developed and reviewed by counselor educators with expertise in adolescents and self-efficacy. The initial scale was piloted and examined for reliability, readability, and item clarity. After the initial review, one item was dropped due to its low correlation with other items resulting in a 30-item scale. The 30-item scale was then tested further with a larger and more diverse sample which included 272 seventh-grade students. A

Cronbach's alpha coefficient of .94 was found, suggesting strong internal consistency. Finally, test-retest reliability was tested to examine reliability over time. A Cronbach's alpha of .88 suggested high levels of consistency over time. There were two subscales within the CGSES, attendance and persistence; however, Gibbons and Borders (2010) found that the total CGSES score was more appropriate than the subscale scores.

The CGSES has been used with both middle school and high school students from various backgrounds. For example, Gibbons and Borders (2010) used the CGSES to study differences in the college-going expectations of middle school students who were prospective first-generation college students compared to their non first-generation peers. They found that prospective first-generation college students had lower college-going self-efficacy beliefs than their non first-generation peers. Gonzalez et al. (2013) also used the CGSES in their research of how aspects of cultural identity impacted the college-going self-efficacy beliefs and aspirations of Latino youth. Results indicated that resilience to barriers and public regard for students' ethnic group were both positively associated with students college-going self-efficacy beliefs. These findings support the use of the CGSES and the SCCT framework, demonstrating that self-efficacy beliefs are related to students' background, culture, and contextual affordances. The reliability of CGSES in current study had a high level of internal consistency ($\alpha = 0.95$).

Demographic Scale

The researcher created a demographic questionnaire for the purposes of this study (See Appendix D). Demographic questions asked students to disclose their age, gender, and race/ethnicity. Students were also asked to identify the educational levels of their mother and father or adult who raised them to identify first-generation status. Other questions asked participants to determine their GPA along with the number of college preparatory courses they

have taken or were currently taking. Additional questions assessed students' college decisions and how well students' plans matched their parents' desires. Students were asked about their own plans after high school, their parent's plans for them after high school, their educational goals, and their parent's educational goals for them. Students were also asked if they had applied to college and if they had been accepted to college. If students had applied to college, they were asked about the types of colleges they applied to and how many applications they submitted. Finally, if students had been accepted to college they were asked to include what type of school they planned to attend.

Data Analysis

Research Question 1: What are the typical levels of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?

Research Question 1.a.: What are the differences by gender, parent education level, and postsecondary plans on adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth

For the first research question, descriptive statistics were performed on the demographic data and study variables. This included frequencies and measures of central tendency where appropriate. T-tests and ANOVAs were also conducted to better understand differences by gender, parent education level, and postsecondary plans. T-tests and ANOVAs compare group means to determine whether there are significant differences between groups. The assumption of homogeneity of variance was tested using Levene's Test of Equality of Variances. If statistically significant differences were found, post-hoc analyses were conducted on the variables of parent education level and postsecondary plans to determine where the differences occurred.

Research Question 1.b.: What are the relationships between adolescent-parent congruence, college-going self-efficacy, and college outcome expectations?

Correlational analyses were used to examine the relationships between adolescent-parent congruence, college-going self-efficacy beliefs, and college outcome expectations. Correlation conveys the strength or magnitude between two continuous variables. The correlation coefficient, r , quantifies the strength and direction of the relationship and is expressed as value between -1 and +1.

Research Question 2: How are college-going decisions impacted by the level of adolescent-parent congruence, college-going self-efficacy beliefs, and college outcome expectations of rural Appalachian youth?

For the second research question, logistic regression was originally proposed to predict the likelihood of various college-decision making factors. Logistic regression would have allowed the researcher to predict the probability of dichotomous dependent variables occurring. The researcher planned to test if the independent variables of gender, parent education level, adolescent-parent congruence, college-going self-efficacy, and college outcome expectations predicted multiple dichotomous dependent variables including planning to pursue a postsecondary education or not, 2-year or 4-year college bound, and applied or not applied to college. However, after data collection occurred it became clear that there was insufficient variability in the dichotomous dependent variables preventing logistic regression from occurring. For example, nearly all participants in the survey planned to pursue a postsecondary education, had applied to a college, and had been accepted to a college. Due to insufficient variability, the researcher revised research question two using the same variables initially proposed. The revised research question two asked, “Which of the following variables (college-going self-efficacy,

college outcome expectations, parent education level, and gender) predict adolescent-parent congruence?”. A sequential multiple regression was conducted to predict adolescent-parent congruence from college-going self-efficacy, college outcome expectations, parent education level, and gender.

Research Question 3: How do rural Appalachian high school students say that adolescent-parent congruence impacts their college decisions?

For the third research question, a thematic analysis (Braun & Clark, 2006) was completed on participants’ responses to the two open response questions in the survey. This method of data analysis was chosen due to the nature of the research question, which is being used to understand participants’ experiences as well as provide further insight into the construct of adolescent-parent congruence. Thematic analysis takes a flexible epistemological position, allowing the researcher to explore both aspects of the research question (Fielden, Sillence, & Little, 2011). The researcher will follow Braun and Clark’s (2006) six phases of thematic analysis which include: 1) familiarize self with data, 2) generate initial codes, 3) search for themes, 4) review themes, 5) define and name themes, and 6) produce the report relating back to the research question.

Braun and Clark’s approach provides a well-defined approach to thematic analysis while allowing for the flexibility of the methodology. The approach uses multiple processes to ensure quality data analysis including the repeated reading of transcripts for data immersion and the use of thematic mapping to support the generation of themes and aid the researcher in visualizing relationships between themes. Numerous qualitative studies employed Braun and Clark’s (2006) approach to thematic analysis providing support for its usefulness as a trustworthy method for qualitative analysis (e.g., Fielden et al., 2011; Schinke, McGannon, Battocchio, & Wells, 2013; Wilkinson, Caulfield, & Jones, 2014).

Chapter 4

Results

Chapter four presents the results of the study. First, descriptive information about the participants are provided. This is followed by the results for each research question.

Description of Participants

High school seniors, over the age of 18, at five rural Appalachian high schools were invited to participate in this study via e-mail or text message. One hundred and sixty-nine students began the survey. Of the students who began the survey, three did not provide consent, 16 were not 18 years of age, and 12 completed less than 10% of the survey. These students were not included in any analyses resulting in 138 useable survey responses. An additional 15 students completed only the adolescent-parent congruence scale before terminating the survey while 8 completed only the adolescent-parent congruence scale and college outcome expectations scale before terminating. These 23 responses were only used in analyses that employed the scales that were completed. No demographic data was collected from these 23 students; therefore, demographic data was collected from 115 students. Specific response rates cannot be determined because the sampling method allowed schools to send the survey independently; therefore, it is unknown exactly how many students received the survey. However, across the five schools there were a total of approximately 950 senior students enrolled. It is unclear how many of these students were 18 years of age or older at the time of survey distribution. Despite this, it seems that the researcher received a low to moderate response rate.

Of the eligible participants who completed demographic data, 40% (46) were male and 58.2% (67) were female. The predominate race/ethnicity of participants was Caucasian at 91.3% (105), followed by Hispanic 7.8% (9), and African American 2.6% (3). The ethnic breakdown in

this study is reflective of the overall ethnicity in rural Appalachia where approximately 89% of the population is Caucasian (Pollard & Jacobsen, 2017). The majority of participants reported living in their current rural Appalachian town for more than six years 85.2% (98), 6.9% (8) reported living there from four to six years, and 7.8% (9) reported living there three years or less. Seventy eight percent of the students who had lived in their current town for three years or less reported moving there from another Appalachian area, meaning that nearly all participants spent their formative years in rural Appalachia. When asked about their overall high school GPA, 39.1% (45) reported having a 3.67 or higher, 55.6% (64) reported a GPA between 2.67 and 3.66, and 5.21 (6) reported a GPA less than 2.66. Thirty eight percent of students (44) had taken no honors, AP, or dual credit courses. Twenty-five percent (29) had taken one or two, 10.4% (12) had taken three or four, and 25.2% (29) had taken five or more. On average, it seems that the participants in this survey took more honors, AP, and dual credit courses compared to the typical high school student in Tennessee. For example, approximately 19% of high school seniors in Tennessee took at least one AP course (Office of Research and Policy, 2013) while in this study approximately 60% of students reported taking at least one advanced class. This study did not, however, differentiate between honors, AP, and dual credit courses preventing the exploration of the types of advanced courses offered and taken at these schools.

Next, students reported on the highest level of education attained by their mother or adult female who raised them and their father or adult male who raised them. Of these, 43.9% (50) of students had mothers with a high school degree or less, 51.8% (59) had mothers with some college courses or a college degree, and 4.4% (5) had no idea what their mother's level of education was. Sixty percent (68) of students had fathers with a high school degree or less, 36% (41) had fathers with some college courses or a college degree, and 4.4% (5) had no idea what

their father's level of education was. The findings in this study regarding the educational attainment of parents are similar to the overall educational attainment in rural Appalachia where 55.9% of adults have a high school diploma but no postsecondary degree (Pollard & Jacobsen, 2017). There were 37 students (32.5%) who were prospective first-generation college students as defined by neither parent attending college. In addition, forty-three students (37.7%) had a sibling who had already started or completed postsecondary education.

Students also reported on their own plans after high school along with their parents' plans for them after high school (See Table 4.1). The majority of students reported that they either planned to attend a 4-year college after graduation or planned to start at a 2-year community college and transfer to a 4-year college. A smaller percentage planned to only attend a 2-year community college. Finally, very few students planned to go straight to work, join the military, or attend a technical school. Students then reported on their parent's plans for them after graduation. Similar to the students' plans for themselves, the majority reported that their parents planned for them to attend a 4-year college upon graduation or said their parents planned for them to start at a 2-year community college and transfer to a 4-year college. Ten students (8.7%) reported having no idea what their parents hoped that they would do after graduation. 27 (23.5%) students reported a plan after high school that was different than the plans they said their parents had for them. When asked about how well the students' plans after high school match the plans of their parents, most students said that their plans matched their parents plans pretty well while few said that their plans did not match at all.

Finally, students shared about the steps they had taken in postsecondary planning. The majority of students had both applied to college (106; 92.2%) and been accepted to college (99; 94.3%). College in this survey referred to any education after high school including a technical

school, community college, or 4-year college or university. Thirty-nine students (37.1%) had only applied to one college while 17 (16.2%) had applied to two, 27 (25.7%) had applied to three, and 22 (21%) had applied to four or more. Of the students who had been accepted into a college, 9.3% (9) planned to attend a technical school or training program, 45.4% (44) planned to attend 2-year community college, and 45.4% (44) planned to attend a 4-year college or university.

Table 4.1

Postsecondary Planning

Variable	N	%
Student's plans after HS		
Straight to work	14	12.2
Military	2	1.7
Technical school or training program	5	4.3
2-year community college	21	18.3
Start at a 2-year college and transfer to a 4-year	25	21.7
4-year college or university	44	38.3
Other	4	3.5
Parent's plans for student after HS		
Straight to work	6	5.2
Military	2	1.7
Technical school or training program	6	5.2
2-year community college	22	19.1
Start at a 2-year college and transfer to a 4-year	23	20
4-year college or university	41	35.7
Other	5	4.3
I have no idea what my parent(s) hope that I will do after graduation	10	8.7
How well student plans match parent plans		
They don't match at all	7	6.1
They match a little	26	22.8
They match pretty well	55	48.2
They completely match	26	22.8

Research Questions

Research Question 1: What are the typical levels of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?

The Adolescent-Parent Career Congruence Scale-Revised (Sawitiri et al., 2012) measured perceived compatibility and similarity between adolescents and their parents regarding the adolescent's college development. The scale included 12 items with the score range for this scale ranging from 1-6. Higher scores indicated more perceived congruence. Results suggested that students perceived moderately high levels of adolescent-parent congruence ($M=4.49$, $SD=0.89$). Scores for the subscale of complementary congruence had a mean of 5.02 ($SD=0.85$). Scores for the subscale of supplementary congruence had a mean of 4.46 ($SD=1.14$). Complementary congruence measured perceived compatibility between adolescents and their parents regarding the adolescent's college development while supplementary congruence measured perceived similarity between adolescents and their parents (Sawitri et al., 2012). A sample question measuring complementary congruence is, "My parents support me in my college plans" while a sample question measuring supplementary congruence is, "My parents want the same college education for me as I want for myself". Based on these results, students appear to perceive more complementary congruence than supplementary congruence. Overall, they perceived a moderate amount of congruence with their parents regarding their postsecondary plans.

The College Outcomes Expectations Scale (Flores et al., 2008) assessed students' beliefs about the value of pursuing a college degree. The COE contained 19 items with scores ranging from 1-6. Higher scores indicated higher college outcome expectations. Mean COE scores were

5.10 ($SD=0.76$). Based on these results, students appear to have high levels of college outcome expectations suggesting that many believe a college education is valuable.

The College-Going Self-Efficacy Scale (Gibbons, 2005) measured a student's beliefs in his or her ability to attend and persist in college. The CGSES contained 30 items, with scores ranging from 1-4. Higher scores indicated higher levels of college-going self-efficacy. Mean CGSE scores were 3.18 ($SD=0.51$). These results suggest that students have moderately high levels of college-going self-efficacy, indicating that many students believe they can attend and persist in college. Table 4.2 provides the descriptive statistics described above.

Table 4.2

Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Adolescent- Parent Congruence	138	2.00	6.00	4.79	0.89
College Outcomes Expectations	123	2.11	6.00	5.10	0.76
College-Going Self-Efficacy	116	1.83	4.00	3.18	0.51

Research Question 1.a.: What are the differences by gender, parent education level, and postsecondary plans on adolescent-parent congruence, college-going self-efficacy, and college outcome expectations of rural Appalachian youth?

Gender. To explore differences by gender, parent education level, and postsecondary plans, a series of t-tests and ANOVAs were conducted. First, differences by gender were explored using independent t-tests. The results of an independent t-test with gender as the independent variable and college outcomes expectations as the dependent variable showed that there were significant differences between males and females in college outcome expectations, $t(111) = -2.25, p > .05$. Females ($M=5.21, SD=0.66$) reported significantly higher levels of college outcome expectations than males ($M=4.89, SD=0.85$). Additional t-tests with gender as the independent variable showed that there were no significant differences between males and females on adolescent-parent congruence, $t(111) = 0.13, ns$, or college going self-efficacy, $t(111) = -1.62, ns$.

Parent education level. Differences by parent-education were explored using a series of one-way between subject ANOVAs. A one-way between-subjects ANOVA with mother's educational level as the independent variable and adolescent-parent congruence as the dependent variable revealed that there was a significant difference in adolescent-parent congruence among the educational level of students' mothers (See Table 4.3). The results of a Tukey posthoc test showed that students whose mother had a high school degree or less ($M=4.51, SD=0.89$) reported lower levels of adolescent-parent congruence compared to students whose mother had some postsecondary experience ($M=5.04, SD=0.82$). The results of an additional ANOVA using father's educational level as the independent variable also produced significant results. A Tukey posthoc test showed that students whose father had a high school degree or less ($M=4.66,$

$SD=0.87$) reported lower levels of adolescent-parent congruence compared to students whose father had some postsecondary experience ($M=5.04$, $SD=0.90$).

Table 4.3

ANOVA between adolescent-parent congruence and parent education level

	Df	F	partial η^2	p
Mother's Education	2, 111	5.22**	.09	.82
Father's Education	2, 111	3.08*	.05	.58

* $p < .05$. ** $p < .01$

When exploring the impact of parent education level on college outcome expectations, a one-way between-subjects ANOVA revealed a significant difference in college outcome expectations among the educational level of students' fathers, $F(2,111) = 5.56$, $p > .01$., partial $\eta^2=.09$, power=.84. The results of a Tukey posthoc test showed students who had no idea what their father's level of education was ($M=4.20$, $SD=1.28$) had lower college outcome expectations compared to students whose father had a high school degree or less ($M=5.04$, $SD=0.71$) and students whose father had some postsecondary experience ($M=5.29$, $SD=0.66$). However, there were only five students who reported that they had no idea what their father's level of education was; therefore, these findings should be interpreted with caution. When using mother's educational level as an independent variable, a one-way between subjects ANOVA revealed no significant differences in college outcome expectations, $F(2,111) = 1.06$, *ns*.

When exploring the impact of parent education level on college-going self-efficacy, a one-way between subjects ANOVA revealed significant differences in college-going self-

efficacy among the educational level of students' mothers, $F(2,111) = 7.48, p > .01.$, partial $\eta^2 = .12$, power = .94, and the educational level of students' fathers, $F(2,111) = 6.43, p > .01.$, partial $\eta^2 = .10$, power = .90 (See Table 4.4). A Tukey posthoc showed that students whose mother had a high school degree or less ($M = 3.03, SD = 0.53$) reported significantly lower college-going self-efficacy than students whose mother had some postsecondary experience ($M = 3.34, SD = 0.44$). Similarly, an additional Tukey posthoc revealed that students whose father had a high school degree or less ($M = 3.10, SD = 0.47$) reported significantly lower college-going self-efficacy than students whose father had some postsecondary experience ($M = 3.37, SD = 0.53$).

Table 4.4

ANOVA between college-going self-efficacy and parent education level

	df	F	partial η^2	p
Mother's Education	2, 111	7.48**	.12	.94
Father's Education	2, 111	6.43**	.10	.90

** $p < .01$

Postsecondary plans. Next, a series of one-way between subject ANOVAs were conducted to explore the impact of students' postsecondary plans on college outcome expectations, college-going self-efficacy, and adolescent-parent congruence. The first ANOVA revealed significant differences in college outcome expectations among students' postsecondary plans, $F(2,94) = 4.41, p > .01.$, partial $\eta^2 = .09$, power = .75. A Tukey posthoc showed that students who plan to attend a technical school or training program ($M = 4.71, SD = 0.56$) reported significantly lower college outcome expectations than students who plan to attend a four-year

college or university ($M=5.34$, $SD=0.52$). Additional ANOVAs with postsecondary plans as the independent variable showed that there were no significant differences on adolescent-parent congruence, $F(2,94) = 0.18$, ns , or college going self-efficacy, $F(2,94) = 3.03$, ns .

Research Question 1.b.: What are the relationships between adolescent-parent congruence, college-going self-efficacy, and college outcome expectations?

To examine the relationship between adolescent-parent congruence, college-going self-efficacy, and college outcome expectations, Pearson correlations were conducted (see Table 4.5). The correlational analyses revealed statistically significant relationships between each of the three variables. There was a moderate positive relationship between adolescent-parent congruence and college outcome expectations, $r(123) = 0.45$, $p < .001$. There was also a moderate positive relationship between adolescent-parent congruence and college-going self-efficacy, $r(116) = 0.48$, $p < .001$. Finally, there was a strong positive relationship between college outcome expectations and college-going self-efficacy, $r(116) = 0.62$, $p < .001$. These findings indicate that a student's level of adolescent-parent congruence is positively correlated to both their college-going self-efficacy and college outcomes expectations. The findings also revealed a strong positive correlation between a student's college-going self-efficacy and college outcome expectations.

Table 4.5*Correlation Matrix*

Variables	(1)	(2)	(3)
(1) Adolescent-Parent Congruence	-		
(2) College Outcomes Expectations	.45***	-	
(3) College-Going Self-Efficacy	.48***	.62***	-

*** $p < .001$.

Research Question 2: Which of the following variables (college-going self-efficacy, college outcome expectations, parent education level, and gender) predict adolescent-parent congruence?

For the second research question, a sequential multiple regression was conducted to predict adolescent-parent congruence from college-going self-efficacy, college outcome expectations, parent education level, and gender (See Table 4.6). Prior to interpreting the results the assumption of multicollinearity was tested. Each tolerance statistic was greater than 0.10 and each variance inflation factor was less than 5.00 indicating that the assumption of multicollinearity was met (Gravetter & Wallnau, 2011). At step one of the analysis, college-going self-efficacy was entered into the model and accounted for 19.1% of total variance in adolescent-parent congruence. College-going self-efficacy significantly predicted adolescent-parent congruence, $F(1,105) = 24.55$, $p < .001$, $R = .44$ and $R^2 = .19$. In the second step, college outcome expectations were entered in the regression model and accounted for an additional 4% of total variance in adolescent-parent congruence. College outcome expectations significantly

Table 4.6*Sequential Multiple Regression of Predictors of Adolescent-Parent Congruence*

Variable	B	SE	β	R ²
Step 1				.19
College-Going Self-Efficacy	.77	.16	.44***	
Step 2				.23
College-Going Self-Efficacy	.50	.20	.28**	
College Outcome Expectations	.31	.14	.25*	
Step 3				.30
College-Going Self-Efficacy	.39	.20	.22*	
College Outcome Expectations	.36	.14	.27**	
Mother's Educational Level	.33	.16	.15*	
Father's Educational Level	.08	.16	.05	
Gender	-.28	.14	-.14*	

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

predicted adolescent-parent congruence, $F(2,105) = 15.16$, $p < .001$, $R = .48$ and $R^2 = .23$. In the third step, parent education level and gender were entered into the equation simultaneously and a statistically significant increase in adolescent parent congruence was found, $F(5,105) = 8.29$, $p < .001$, $R = .54$ and $R^2 = .30$. The additional variables added to the overall significance of the model; however, father's educational level was not a significant independent predictor of adolescent-parent congruence.

In the final model, 30% of the total variance in adolescent-parent congruence was accounted for by the entered constructs. College-going self-efficacy, college outcome expectations, mother's educational level, and gender all significantly predicted adolescent-parent congruence. College-going self-efficacy was the best predictor of adolescent-parent congruence. Results of the final regression model showed that for every one-unit increase in college-going self-efficacy, a student's adolescent-parent congruence score increases by .39 points. In addition, for every one-unit increase in college outcome expectations, a student's adolescent-parent congruence score increases by .36 points. Students whose mother had some college experience or a college degree on average scored .33 points higher on adolescent-parent congruence compared to students whose mother had a high school degree or less. Finally, compared to males, females scored .28 points lower on adolescent-parent congruence than males. The equation for the regression line is: $Y = 1.68 + .39X_1 + .36X_2 + .33X_3 + .08X_4 - .28X_5 + e$.

Research Question 3: How do rural Appalachian high school students say that adolescent-parent congruence impacts their college decisions?

For the third research question, a thematic analysis (Braun & Clark, 2006) was completed on participants' responses to the two open-ended questions in the survey. Responses were first categorized into two groups based on the two open-ended questions. Next, Braun and Clark's

(2006) steps of thematic analysis were followed which include: 1) familiarize self with data, 2) generate initial codes, 3) search for themes, 4) review themes, 5) define and name themes, and 6) produce the report relating back to the research question.

For the first group of open-ended responses, students were asked to describe two ways that their parent(s) supported them in their plans after high school. Participants provided 217 unique responses to this question. Eleven responses were not coded due to a lack of clarity. Responses not coded included items such as “No” and “They just do”. Appendix E provides participant responses used to develop the following themes. Note that the responses in Appendix E are raw data which includes incorrect spelling and grammatical errors. Two main themes emerged from these data: *Emotional Support* and *Concrete Support Tasks*. The codes that made up the theme of *Emotional Support* included encouragement, agreeance, and general support. Example responses from students coded as *Emotional Support* included phrases such as, “My parents also support me in my plans after high school by encouraging me to be the best person and student I can be and to get good grades”, “They agree that my plans are a good fit for me”, and “They support me in all ways”. The codes that made up the second theme of *Concrete Support Tasks* included college planning support, financial support, and living support. Few students had responses falling into the living support code. Example responses from students coded as *Concrete Support Tasks* included, “They helped me apply for college”, “They are helping me pay for my books”, and “Letting me live at home until I graduate”. Based on these results, students appear to receive two main types of support from their parents regarding their postsecondary plans, emotional support and concrete support.

For the second group of open-ended responses, students were asked to describe two ways that their wishes and their parent’s wishes were different regarding their plans after high school.

Participants provided 158 responses, to this question. Appendix F provides participant responses used to develop the following themes. Note that the responses in Appendix F are raw data which includes incorrect spelling and grammatical errors. Four main themes emerged from these data: *College Planning Differences*, *Career Planning Differences*, *Financial Choices*, and *Location During College*. *College Planning Differences* contained the following codes: college vs. no college, major choice, school choice, degree level, and in college activities. Responses from students within this theme included statements such as, “They want me to stay home for a year, I wish to go straight to college”, “They don’t want me to study Spanish”, “I want to go to a university but they want me to go to a smaller school”, “My parents want me to start at a community college. I want to go straight to a four-year college”, and “My dad does NOT want me to study abroad”. The theme of *Career Planning Differences* contained the codes career field choice, career values, and working while in college. Responses within this theme included, “They want me to go into the medical field, I want business”, “They want me to make a lot of money, I don’t care how much I make so long as I love my job”, and “I want to work during college and they do not want me to”. *Financial Choices* consisted of two codes, use of scholarship and cheaper school. Student responses in this theme were statements like, “They’ve always wanted me to take the two-years free” and “They want it to be cheaper but I just want to go to the best school for my major no matter the cost”. Finally, the theme of *Location During College* contained the following codes: moving out, distance, and living on campus. This theme included responses such as, “I wish to move out while they want me at home”, “They don’t like that it’s 2 hours away”, “I’m staying on campus and my parents want me to stay home”. It appears that students perceive incongruence with their parents regarding their postsecondary plans in four main areas including college, career, finances, and location.

Summary

The results of the analyses conclude that rural Appalachian youth in this study have a moderate amount of congruence with their parents regarding postsecondary plans, moderately high levels of college-going self-efficacy, and high levels of college outcomes expectations. High positive correlations were found between each of these three variables. In addition, multiple variables were found to predict students' adolescent-parent congruence including college-going self-efficacy, college outcome expectations, mother's educational level, and gender. Finally, while students reported moderate levels of adolescent-parent congruence on the quantitative measure, they demonstrated experiences of incongruence when asked about incongruence in an open-ended format. Chapter five provides more detail and discussion regarding these results.

Chapter 5

Discussion and Implications

This chapter provides a summary of the research conducted and a discussion of the previous results. First, a discussion of the major findings is provided which includes an understanding of the population, a presentation of the SCCT variables studied, and a discussion of adolescent-parent congruence findings. Next, limitations of the current study are presented. Finally, implications for future research, counselors, and counselor educators are described.

Summary of Research

The purpose of this study was to explore the relationship between adolescent-parent congruence on the SCCT variables of college-going self-efficacy beliefs, college outcome expectations, and college decision-making in rural Appalachian youth. Specifically, the variables of adolescent-parent congruence, college-going self-efficacy, and college outcome expectations were explored. Because of the limited research on rural Appalachian youth and SCCT with the population, the first intent of this research was to understand the population through reported scores on each scale and their demographic characteristics. Next, because no previous research explored the construct of adolescent-parent congruence and its relationship with the SCCT variables of college-going self-efficacy, college outcome expectations, or postsecondary decisions in rural Appalachian youth, these constructs were explored. Finally, the study sought to provide additional information and insight into how the parent-adolescent relationship impacts college-going in rural Appalachian populations.

Discussion of Major Findings

Understanding the Population

Demographic information collected in this survey confirms some information already known about rural Appalachian youth. The majority of students in the study were Caucasian and less than 10% reported being from an ethnic minority. This is reflective of the ethnic makeup in rural Appalachia where limited ethnic diversity exists (Pollard & Jacobsen, 2017). Most students reported living in the rural Appalachian region for an extended period of time, more than four years, while few students reported having recently moved to the region. Of those students who reported recently moving to the area, the majority reported moving from within Appalachia. This finding supports the collectivist values in the Appalachian region, specifically the value of localism which is characterized by a strong attachment to place (Keefe, 2005).

Research suggests that rural Appalachian youth are likely to come from homes with low levels of educational attainment (Pollard & Jacobsen, 2017). Over half of participants in this study had fathers or adult male who raised them with an educational attainment of a high school degree or less. In addition, almost half of students had mothers or adult female who raise them with an educational attainment of a high school degree or less. Previous studies also indicated that rural Appalachian students are likely to be first-generation college students (Bradbury & Mather, 2009; Chenoweth & Galliher, 2004). I defined first-generation status in this study by neither parent having attended college or completed a college degree. Thirty-three percent of students reported that neither parent had any experience with postsecondary education. This study did not account for participants with a lack of a female or adult male in their lives. The participants in this study appear to reflect the typical demographics of rural Appalachian youth in general.

While the participants were similar to rural Appalachian youth in many ways, there were a few significant differences. First, students in this study reported taking more honors, AP, and dual credit courses compared to the typical high school student in Tennessee (Office of Research and Policy, 2013). One reason for this finding could be that the demographic question which asked about participation in advanced coursework did not differentiate between honors, AP, and dual credit courses. In addition, no parameters were given to indicate what constitutes a course being offered as “honors”.

Another conflicting finding to note regarding these participants was their postsecondary plans, applications, and acceptance rates. Previous research with rural Appalachian students found lower college-going rates throughout the region (Chenoweth & Galliher, 2004). Similarly, lower parental education levels have been found to predict lower college aspirations, a decreased likelihood of applying to college, and decreased college attendance (An, 2010; Chenoweth & Galliher, 2004; Sandfur et al., 2006). In addition, Ali and McWhirter (2006) noted that rural Appalachian students did not feel confident pursuing a postsecondary education. Findings from the current study, however, do not reflect this previous research. In the current study, the overwhelming majority of students reported that they planned to attend a technical school or training program, a two-year community college, or a four-year university after graduation. In addition, almost 100% of students surveyed had both applied and been accepted to a postsecondary institution. One likely explanation for these findings is the establishment of a recent state-wide scholarship offered to all students in the state where this research occurred. This scholarship covers students’ tuition and fees not covered by other financial aid at any of the state’s 13 community colleges, 27 colleges of applied technology, and other postsecondary institutions offering associate’s degree program (TN Achieves, 2015). The scholarship is focused

on increasing the number of students who attend college throughout the state. Many high schools across the region strongly encourage all senior students apply to the scholarship program which in turn greatly raises the number of high school seniors who apply and are accepted to college. While there has been a significant increase in the number of students applying and being accepted to college due to this scholarship opportunity, this does not ensure that all students who apply and are accepted will actually enroll in college. For example, in 2015, approximately 55,000 students applied to the scholarship program while only 22,000 students actually enrolled for fall courses (Smith, 2015; TN Achieves, 2015). Therefore, the number of students who reported applying and being accepted to college in this study may not be an accurate representation of the actual number of students who enroll in college in the fall. Nationally, research shows that approximately 70% of high school graduates were enrolled in college directly after high school (BLS, 2016). However, college enrollment rates were the lowest of any group (44%) in high school graduates from low income, low minority, rural schools, which describes rural Appalachia (National Student Clearinghouse [NCS], 2015). These findings suggest that the college application and acceptance rates found in this study may not be reflective of actual future college enrollment.

Despite the drop off between applying and enrolling in courses, there has still been a significant increase in the number of students enrolling in college across the state. Between 2014 and 2015, Tennessee saw a 24% increase at community colleges and a 20% increase at technical institutions. This increase observed in one year was larger than the previous seven years combined (TN Achieves, 2015). Therefore, the college-going rate in the participants studied may be higher than the college-going rates in other Appalachian states.

Social Cognitive Variables

The first research question focused on the SCCT (Lent et al., 1994) constructs of college-going self-efficacy and college outcome expectations along with the new construct of adolescent-parent congruence. SCCT was the theoretical framework used in this study to understand students' educational and career decision making processes. This developing theory has received significant empirical support (Flores et al., 2016); however, there are fewer studies which explore SCCT variables with rural Appalachian youth. The discussion below seeks to better understand the college-going process of rural Appalachian youth within the frame of SCCT.

College-going self-efficacy. Gibbons (2005) described college-going self-efficacy as a students' belief in his or her ability to attend and persist in college. In this study, students reported a moderately high level of college-going self-efficacy, suggesting that they had confidence in their abilities to attend and remain in college. While overall students reported moderately high levels of college-going self-efficacy, one main between-group difference was found. Results showed that students whose parents had low levels of educational attainment (a high school degree or less) reported significantly lower college-going self-efficacy beliefs than students whose parents had some experiences with postsecondary education. These findings emphasize the strong role that parent education level may have on students' college-going beliefs. Results found here support previous research that prospective first-generation college students had lower college-going self-efficacy beliefs than their non first-generation peers (Gibbons & Borders, 2010). The findings also support the SCCT model, which indicates that self-efficacy beliefs are impacted by a student's contextual affordances (Lent et al., 2000).

When examining correlational findings, results showed a strong positive relationship between college-going self-efficacy beliefs and college outcome expectations. The results

indicated that as a students' college-going self-efficacy beliefs increased, their college outcome expectations increased as well. This is in alignment with other studies which also demonstrated a strong positive relationship between educational or college-going self-efficacy and college outcome expectations (Ali & McWhirter, 2005; Gibbons & Borders, 2010). It seems that these SCCT constructs are highly related to one another indicating their interconnectedness. In addition, this finding provides support for the overall SCCT model related to this population as SCCT proposes that outcome expectations are often associated with and influenced by self-efficacy beliefs (Lent et al., 1994).

College outcome expectations. College outcome expectations consider a student's beliefs about the value of pursuing a college degree (Flores et al., 2008). In this study, students indicated high levels of college outcome expectations, suggesting that many of these students believed a college education was valuable. Results did not come as a surprise based on the previous results regarding students' college-going self-efficacy. Flores et al. (2016) found self-efficacy beliefs to be the strongest predictor of outcome expectations. Findings in this study provide further support for the SCCT model related to this population, which indicates that self-efficacy beliefs influence outcome expectations (Lent et al., 1994); therefore, having high college-going self-efficacy beliefs will likely lead to high college outcome expectations.

Two important between group differences were found in students' college outcome expectations. First, females reported higher levels of college outcome expectations than males. Gender differences in college outcome expectations with rural Appalachian youth is a new finding not seen in previous research. However, a previous study did find that rural Appalachian males rated getting a college education as an important life goal significantly less often than non-rural Appalachian males (Brown et al., 2009). In addition, previous research identified gender

differences regarding how rural Appalachian students decided to pursue college, with males being more influenced by their family and peers while females were more influenced by their academic preparation (Chenoweth & Galliher, 2004). Hendrickson (2012) also acknowledged that family values could create resistance to school in rural Appalachian youth. It is possible that rural males are more influenced by the educational achievement of their families than females, and as previously noted, many rural Appalachian families have low levels of educational attainment. In addition, many students from families where parents have low levels of education receive mixed messages about pursuing college (Stephens et al., 2015; Wang, 2012, 2014). Another explanation for why rural Appalachian males may score lower on college outcome expectations could be that they are receiving mixed messages from their families regarding college-going, and these mixed messages may be more influential for males than females.

The next group difference found was that students who reported planning to attend a technical school or training program reported significantly lower college outcome expectations than students who planned to attend a four-year college or university. Ali and McWhirter (2006) also found that rural Appalachian students aspiring to vocational or technical training had significantly lower college outcome expectations than students aspiring to a four-year degree or higher. One explanation for technical school bound students' low college outcome expectations is their lack of academic preparation. Previous studies demonstrated that students from rural Appalachia are often academically unprepared to enter college and require remedial coursework upon enrollment (Hlinka, 2017). In addition, students who enter into a technical school or community college are often less academically prepared than those who go straight to a four-year college or university (Hagedorn, 2010). These findings are further supported by previous studies

which demonstrated that outcome expectations impact students' postsecondary aspirations and college choice (Ali & Saunders, 2009; Ali & McWhirter, 2006; Bennett, 2008).

Another possible explanation for technical school bound students' lower college outcome expectations is that the value of a full college education is not necessary for this population. Students pursuing a technical or vocational school likely have career aspirations that do not require a full, four-year college education; therefore, they may not view a full college education as valuable for their own path. For example, if I plan to be an automotive mechanic requiring a technical degree then a four-year degree may not be of value for me.

Adolescent-Parent Congruence

The first and third research questions in this study included an exploration of adolescent-parent congruence in rural Appalachian youth. Adolescent-parent congruence in this study referred to students' perceptions of compatibility and similarity between their own college going plans and their parents' college going plans for them (Sawitri et al., 2012). Findings indicated that level of adolescent-parent congruence was positively correlated to both college-going self-efficacy and college outcomes expectations. Results also found that college-going self-efficacy beliefs and college outcome expectations were the strongest predictors of adolescent-parent congruence. These findings support adolescent-parent congruence as related to SCCT variables, and therefore indicates its usefulness in the model. It seems that adolescent-parent congruence is an important contextual influence related to students' educational decision-making process.

Students reported perceiving a moderate amount of congruence with their parents regarding their postsecondary plans according to the adolescent-parent congruence scale. In addition, most students said that their postsecondary plans matched their parents plans pretty well while few said that their plans did not match at all. Although students indicated a moderate

amount of support with their parents on the quantitative measures, their responses to the open-ended questions demonstrated various types of incongruence that they experienced. It is possible that while students can identify ways that their wishes and their parent's wishes are different regarding their plans after high school, they don't perceive these differences as incongruence. As described in Chapter Four, the thematic analysis revealed four main types of incongruence that students reported experiencing; *College Planning Differences*, *Career Planning Differences*, *Financial Choices*, and *Location During College*.

Incongruence. The *College Planning Differences* and *Career Planning Differences* themes reported by students seem to support previous research which found that students often receive mixed messages from parents regarding their plans after high school which can create incongruence between the student and parents (Gofen, 2009; Wang, 2012, 2014; Yolanda, Greenfield, & Burgos-Cienfuegos, 2015). Stephens et al. (2015) noticed these mixed messages to be especially salient in families where parents have low levels of education, which includes many students in the current study. The types of college planning differences that students experienced included differences about if the student should go to college, where they should go, and what they should study. Some students reported wanting to attend college while their parents wanted them to work, and other students shared not wanting to attend college after graduation while their parents were pushing college. Hendrickson (2012) noted a similar finding that many rural Appalachian students had families that did not know about or encourage college and that families encouraged work that did not require a college degree. Additional examples of career planning differences included the students' career field choice, their career values, and whether the student should work in college.

The themes of *Location During College* and *Financial Choices* both reflect previous findings regarding the cultural-values conflicts that rural Appalachian students often face regarding college-going (Ali & Saunders, 2006; Bryan & Simmons, 2009; Stephens et al., 2012; Wright, 2012). For example, many students in this study talked about a desire to move away for college, but shared that their parents wanted them to stay close by or live at home. This confirms the hypothesis from Bryan and Simmons (2009) which suggested that the pursuit of a postsecondary education may require rural students to move away from the community which conflicts with values of localism and familism (Bryan & Simmons, 2009). An additional cultural-values conflict that emerged relates to finances. Ali and Saunders (2006) suggested that prospective first-generation students in rural Appalachia may need financial support and assistance when pursuing a postsecondary education, which conflicts with their values of independence and self-reliance. In this study, many students discussed a desire to work during college, demonstrating their value of independence and self-reliance, but noted that their parents did not want them to work while in school.

Support. While students shared various experiences of incongruence, students also reported receiving support from their parents regarding their plans after high school. The two types of support students shared that they received included *Emotional Support* and *Concrete Support*. This finding reflects prior research suggesting that students receive two main types of support from parents regarding postsecondary education: general and concrete support (Moschetti & Hudley, 2015; Nicholas & Islas, 2016). Previous studies also show that first-generation college students often receive general emotional support from their parents, but the majority of these families are unable to provide active support through concrete assistance with college-going activities due to their lack of experience (Neumeister & Rinker, 2006; Tate et al.,

2015). In the current study, 54 types of unique responses regarding support were provided from prospective first-generation college students. Of those 54 responses, only about one-fifth described concrete college planning support tasks while the others described emotional support tasks.

The results regarding students' level of adolescent-parent congruence indicate that while students experience differences between their own plans and their parents' plans for them after high school, many also simultaneously receive support from their parents regarding their plans after high school. These findings support research which found that family is often a complicated factor in rural Appalachian youth's transition to college, at times a support and at other times a burden (Bradbury & Mather, 2009). It is possible that students' moderate levels of adolescent-parent congruence as well as their experiences of both incongruence and support in this study are reflective of the complicated nature of parents' role in the college-going process.

Predictors of adolescent-parent congruence. Research question two explored whether SCCT constructs and demographic variables predicted levels of adolescent-parent congruence. College-going self-efficacy, college outcome expectations, parent education level, and gender were found to account for 30% of the total variance in adolescent-parent congruence. College-going self-efficacy was the strongest predictor followed closely by college outcome expectations and mother's educational level. Thirty percent is regarded as a low R-squared, and although four predictors were found to be statistically significant, there are clearly other variables impacting adolescent-parent congruence not accounted for in the model. Other SCCT variables not assessed in this study include variables such as SES, parental involvement, learning experiences, and educational barriers. Therefore, the impact of these additional variables on adolescent-parent congruence remains unknown. Parental involvement may be one variable of increased interest as

previous studies have shown increased parental involvement to be related to higher educational aspirations (McCarron & Inkelas, 2006) and lower college dropout rates (Ishitani & Snider, 2002). While a low percentage of explained variance was found in this analysis, these findings can still provide important information.

It seems that college-going self-efficacy, college outcome expectations, mother's educational level, and gender are all important factors in a students' perceived level of adolescent-parent congruence. Students with higher college-going self-efficacy and college outcome expectations seem to have higher levels of congruence with their parents regarding college. In addition, students whose mother had a high school degree or less had lower levels of adolescent-parent congruence. Parents with low educational levels often have limited knowledge about college (Hallett & Griffen, 2015; King, 2012; Perna & Titus, 2005), and as such may have difficulty understanding their child's college aspirations and assisting their child with college-going tasks which could lead to increased incongruence.

Results from this analysis also indicate that college-going self-efficacy, college outcome expectations, parent education level, and gender are not enough in predicting adolescent-parent congruence. This leads us to ask what other factors, not accounted for in this research, account for the remaining 70% of variance in adolescent-parent congruence. Additional research may further explore this construct.

Limitations

There were several limitations to this study. The participants surveyed were students from five rural Appalachian high schools in a single state. The location where students were surveyed offers a state-wide scholarship program allowing any student in the state to attend a community college or technical school at no cost. Due to this program, the college application

rate and acceptance rate are likely not an accurate representation of the Appalachian region as a whole. In addition, because of the high application and acceptance rate found in this study, research question 2 had to be revised due to a lack of variability. This prevented the researcher from predicting the likelihood of students applying and being accepted to college. Finally, these findings may be more representative of rural Appalachian students living in the state where a state-wide scholarship is offered.

In addition, students surveyed were enrolled in the spring semester of their senior year of high school; therefore, the population is limited to students who have persisted to this level in their educational achievement and does not include students who dropped out or chose to earn a high school equivalency diploma. Participants were required to be 18 years of age or older to participate in the study, and so the sample does not represent the high school senior population as a whole. It also seems that the survey had a relatively low response rate; therefore, the survey only represents the small sample of students who chose to respond to the survey. It could be that the students who chose to respond to a “college decisions survey” were students who planned to attend college. Overall, this was a relatively small sample size and the research was specific to one area of Appalachia. The results are limited to the population which was studied, and caution should be taken in generalizing findings to other rural communities due to the unique cultural context of the Appalachian region.

It is also important to note that the adolescent-parent congruence scale used in this research was adapted for the purposes of the study. The scale was adapted to focus on educational congruence versus career congruence for which the scale was originally created. For this reason, the adolescent-parent congruence scale used in this research was an adapted measure lacking specific reliability and validity evidence which may impact the generalizability of

results. Finally, the data collected is based on self-report by participants; therefore, responses could be impacted by factors such as social desirability and errors in self-observation.

Implications

Future Research

There are several recommendations for future research which would expand on this study and benefit the current literature. First, this study could be replicated with a larger sample size and broader location. This study had a relatively small sample size and only represents five rural Appalachian high schools in a single state. Having a broader sample representing more of rural Appalachia would increase generalizability.

This study provides further evidence that SCCT is likely an appropriate theoretical model through which to study the educational decision-making process of rural Appalachian youth. Due to the limited amount of SSCT research that exists with this population, future research could further explore SCCT with rural Appalachian youth. Additional aspects of the SCCT model not explored in this study (i.e. learning experiences, interests, additional barriers and supports) should also be studied to provide a more thorough investigation of the model's fit. Next, the current study found gender differences in rural Appalachian students' college outcome expectations which is a finding not seen in previous studies. Future research exploring these gender differences would be beneficial. Third, since the results suggested that adolescent-parent congruence is a complicated factor in students' postsecondary plans, future research could also focus on what factors contribute to or detract from adolescent-parent congruence. By examining predictors of adolescent-parent congruence, researchers may be able to identify aspects that would increase congruence. Finally, assessing students once they enroll in college would help to increase insight into what aspects are influential in students' college-going process. The current

study could only assess students' intent to attend college, but was unable to identify whether or not the student would actually attend college.

Counselors and Helping Professionals

Counselors and other helping professionals working with rural Appalachian youth throughout the college-going process can utilize findings from this study in various ways. First, it seems that this population was one in which the majority of students intended to pursue some type of postsecondary education. In addition, the majority of students perceived that their parents also intended for them to pursue some type of postsecondary education after high school. Clearly, there was a strong intention to attend postsecondary education in these families, and as such it seems that college-planning should be discussed with both students and parents early and often. The results from this study also suggest that significant differences exist between students whose parents have limited experience with postsecondary education and those whose parents have more experience. When working with these families it is important for counselors to remember that families with low levels of educational attainment may need increased support and assistance throughout the college-planning process. Outreach to students and parents may be helpful at providing such information, assistance, and encouragement.

The results from this study were largely consistent with the major tenets of SCCT and support the use of this model with rural Appalachian students. SCCT was developed to consider the impact that environment, culture, and context have on how individuals make educational choices (Lent et al.,1994). It seems important for counselors to consider students environment along with their levels of college-going confidence and outcome expectations as they work with students in their college planning. This study also provides evidence for the idea that both college-going self-efficacy and college outcome expectations are important parts of students'

educational decision making and levels of adolescent-parent congruence. Ways that self-efficacy and outcome expectations may be increased includes providing postsecondary information and education, involving students' families and community members, and promoting frequent discussions of college planning. By addressing these factors, helping professionals can work with students to better understand the college-going process and provide them with holistic support.

Finally, rural Appalachian youth are a population with unique cultural values that influence their college-decision making process, family being one of these values. It seems important for counselors to consider these cultural values in their work with students, which can be accomplished through the use of SCCT. Results from this research suggest that family plays a complicated role in rural Appalachian students' college decisions. It seems that students experience differences between their own plans and their parents' plans, but overall perceive moderate levels of congruence. It is possible that students have had limited discussions about their postsecondary goals and plans with parents, creating uncertainty about their parents beliefs about college-going. It may also be that parents and/or students have inaccurate or conflicting information about college-going tasks, leading to disagreement. A student, for example, may have been told by a teacher that they can receive significant financial assistance to attend a four-year university while the students' parent has heard that four-year universities are the most expensive option. Counselors may consider offering programs that bring parents and students together, offering a space to start conversations about postsecondary plans. In addition, when working with students in college-planning tasks, counselors and helping professionals should explore students' perceptions of what their parents expect and explore how these expectations impact them.

Counselor Educators

This study also has some implications for counselor educators. Social and cultural diversity is a core content area covered in accredited counseling programs (CACREP, 2016). While diversity is a main focus in numerous counseling programs, it is unlikely that many programs specifically discuss the Appalachian population as a minority group. This is because, despite their unique cultural needs, Appalachian Americans have been characterized as an “invisible minority” due to their outward appearance being not visibly different from the majority culture in mainstream America (Tang & Russ, 2007). As such, it is important for counselor educators to provide effective training regarding working with Appalachian populations.

One way that counselor educators might approach this topic is through a discussion about the differences between rural, urban, and suburban students’ educational attainment. Prior research demonstrates various disadvantages that students from rural communities face when pursuing postsecondary education, which often creates disparities in college enrollment and educational attainment (Byun et al., 2012). Although this may be an avenue for broaching the topic, only considering rural students as a homogenous group could be problematic due to the variability in rural populations across the country. Rural communities vary greatly in terms of their cultural values, ethnic makeup, occupational opportunities, and geographic location. Rural Appalachian individuals, for example, hold strong collectivist values, are mostly white, have decreased occupational opportunities due to the dissolution of coal mining, and are often geographically isolated. Since Appalachia is such a unique and vast region, home to more than 25 million Americans (ARC 2016), it seems important for counselor educators to include this

population in their training. This is especially vital for counselor educators within the Appalachian region.

Conclusion

This study explored the relationship between adolescent-parent congruence on the SCCT variables of college-going self-efficacy beliefs, college outcome expectations, and college decision-making in rural Appalachian youth. The reported demographics of the population support previous research in that a large percentage were from families with low levels of educational attainment and were white. The results of the analyses conclude that rural Appalachian youth have a moderate amount of congruence with their parents regarding postsecondary plans, moderately high levels of college-going self-efficacy, and high levels of college outcomes expectations. Positive relationships were found between each of these three variables. Furthermore, college-going self-efficacy, college outcome expectations, mother's educational level, and gender predicted students' level of adolescent-parent congruence. The major tenets of SCCT were supported in this study, providing further evidence for the use of this model with rural Appalachian students. Finally, adolescent-parent congruence was a complicated construct for these participants, with students reporting moderate levels of congruence while also sharing various experiences of incongruence. Further research into the postsecondary process of rural Appalachian youth is needed in an effort to better understand and support this disadvantaged population.

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Appendices

Appendix A

Adolescent-Parent Career Congruence Scale – Revised

Directions: Please select the degree to which you agree or disagree with each statement below by indicating the appropriate number to the right of each statement.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
My parents encourage me to explore the work and/or college areas I am interested in	1	2	3	4	5	6
My parent support me in my work and/or college plans	1	2	3	4	5	6
My parents show me how to get the information I need for my work and/or college interests (<i>e.g., see someone, search online resources</i>)	1	2	3	4	5	6
My parents approve of the plans I am making for work and/or college	1	2	3	4	5	6
The progress I have made towards my work and/or college goals makes my parents happy	1	2	3	4	5	6
My parents help me to explore my work and/or college interests (<i>e.g. showing me resources, taking me to work and/or college fairs</i>)	1	2	3	4	5	6
My parents are satisfied with the effort I have put in so far to achieve my work and/or college goals	1	2	3	4	5	6
My parents want the same college education for me as I want for myself	1	2	3	4	5	6
My parents and I have similar work and/or college interests	1	2	3	4	5	6

The work and/or college plans I have for myself are similar to the plans that my parents have for me	1	2	3	4	5	6
I am interested in the work and/or college options that my parents expect me to enter	1	2	3	4	5	6
My parents and I have the same way of defining work and/or college success	1	2	3	4	5	6

Directions: Please answer the following questions about your family's influence on your plans after high school to the best of your ability.

Describe 2 ways that your parent(s) support you in your plans after high school.

1.

2.

Describe 2 ways that your wishes and your parent's wishes are different regarding your plans after high school.

1.

2.

Appendix B

College Outcomes Expectations (COE) Questionnaire

Directions: Please select the degree to which you agree or disagree with each statement below by indicating the appropriate number to the right of each statement.

	1	2	3	4	5	6
	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Strongly Agree	Strongly Agree
1. A college education will allow me to obtain a well-paying job.					1 2 3 4 5 6	
2. A college education will allow me to obtain a job I like doing.					1 2 3 4 5 6	
3. With a college education, I will be respected by others.					1 2 3 4 5 6	
4. A college education will allow me to get a job where I can use my talents and creativity.					1 2 3 4 5 6	
5. A college education will leave me enough time to have things like a family, friends, and leisure time.					1 2 3 4 5 6	
6. A college education will give me the kind of lifestyle that I want.					1 2 3 4 5 6	
7. With a college education, I will be better able to achieve my career goals.					1 2 3 4 5 6	
8. A college education will increase my career opportunities.					1 2 3 4 5 6	
9. If I get a college education, then my family will be pleased.					1 2 3 4 5 6	
10. If I get a college education, then I will be better able to achieve my future goals in life.					1 2 3 4 5 6	
11. A college education will increase my knowledge base.					1 2 3 4 5 6	
12. If I get a college education, then I will be able to pursue the career of my choice.					1 2 3 4 5 6	
13. If I get a college education, then I will do well in life.					1 2 3 4 5 6	
14. A college education will give me the opportunity to meet new people.					1 2 3 4 5 6	
15. If I get a college education, then I will learn what I need to know to make good decisions in my life.					1 2 3 4 5 6	
16. A college education will give me the time to explore different career interests in my college courses.					1 2 3 4 5 6	
17. A college education will give me an opportunity to make several friends.					1 2 3 4 5 6	
18. If I get a college education, then I will be better prepared for life.					1 2 3 4 5 6	
19. If I get a college education, then it will cause problems in my family.					1 2 3 4 5 6	

Appendix C
College-Going Self-Efficacy Scale
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Directions: Please read each of the following questions and answer them as honestly as possible. Circle the response that best describes how sure you feel about each question. There are no right or wrong answers. When answering these questions, remember that college means any type of schooling after high school (community college, four-year university).

How sure are you about being able to do the following:

1. I can find a way to pay for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
2. I can get accepted to a college	Not at all Sure	Somewhat Sure	Sure	Very Sure
3. I can have family support for going to college	Not at all Sure	Somewhat Sure	Sure	Very Sure
4. I can choose a good college	Not at all Sure	Somewhat Sure	Sure	Very Sure
5. I can get a scholarship or grant for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
6. I can make an educational plan that will prepare me for college	Not at all Sure	Somewhat Sure	Sure	Very Sure
7. I can make my family proud with my choices after high school	Not at all Sure	Somewhat Sure	Sure	Very Sure
8. I can choose college courses that best fit my interests	Not at all Sure	Somewhat Sure	Sure	Very Sure
9. I can pay for college even if my family cannot help me	Not at all Sure	Somewhat Sure	Sure	Very Sure
10. I can get good grades in my high school math classes	Not at all Sure	Somewhat Sure	Sure	Very Sure
11. I can get good grades in my high school science classes	Not at all Sure	Somewhat Sure	Sure	Very Sure
12. I can choose the high school classes needed to get into	Not at all Sure	Somewhat Sure	Sure	Very Sure

a good college	Not at all Sure	Somewhat Sure	Sure	Very Sure
13. I can know enough about computers to get into college	Not at all Sure	Somewhat Sure	Sure	Very Sure
14. I can go to college after high school	Not at all Sure	Somewhat Sure	Sure	Very Sure

If you do go to college, how sure are you about being able to do the following:

1. I could pay for each year of college	Not at all Sure	Somewhat Sure	Sure	Very Sure
2. I could get A's and B's in college	Not at all Sure	Somewhat Sure	Sure	Very Sure
3. I could get my family to support my wish of finishing college	Not at all Sure	Somewhat Sure	Sure	Very Sure
4. I could take care of myself at college	Not at all Sure	Somewhat Sure	Sure	Very Sure
5. I could fit in at college	Not at all Sure	Somewhat Sure	Sure	Very Sure
6. I could get good enough grades to get or keep a scholarship	Not at all Sure	Somewhat Sure	Sure	Very Sure
7. I could finish college and receive a college degree	Not at all Sure	Somewhat Sure	Sure	Very Sure
8. I could care for my family responsibilities while in college	Not at all Sure	Somewhat Sure	Sure	Very Sure
9. I could set my own schedule while in college	Not at all Sure	Somewhat Sure	Sure	Very Sure
10. I could make friends at college	Not at all Sure	Somewhat Sure	Sure	Very Sure
11. I could get the education I need for my choice of career	Not at all Sure	Somewhat Sure	Sure	Very Sure
12. I could get a job after I graduate from college	Not at all Sure	Somewhat Sure	Sure	Very Sure
13. I would like being in college	Not at all Sure	Somewhat Sure	Sure	Very Sure
14. I could be smart enough to finish college	Not at all Sure	Somewhat Sure	Sure	Very Sure
15. I could pick the right things to study in college	Not at all Sure	Somewhat Sure	Sure	Very Sure
16. I could do the classwork and homework assignments in college classes	Not at all Sure	Somewhat Sure	Sure	Very Sure

Appendix D

Demographic Scale

1. What is your gender?
 - a. Male
 - b. Female
 - c. Other
 - d. Prefer not to answer
2. What is your race? (Check all that apply)
 - a. White
 - b. Hispanic or Latino
 - c. Black or African American
 - d. Asian
 - e. American Indian or Alaska Native
 - f. Native Hawaiian or Other Pacific Islander
3. What is the highest level of education obtained by your mother (or adult female who raised you)?
 - a. Less than high school
 - b. High school graduate (or G.E.D)
 - c. Some college but no degree (took some courses but did not finish)
 - d. Postsecondary certificate (specialized training such as cosmetology, HVAC, or police academy)
 - e. Two-year college graduate (such as Pellissippi State Community College or Roane State Community College)
 - f. Four-year college graduate (Such as UT or ETSU)
 - g. Graduate school (Beyond a 4-year degree such as a master's degree or doctoral degree)
 - h. I have no idea my mother's level of education
4. What is the highest level of education obtained by your father (or adult male who raised you)?
 - a. Less than high school
 - b. High school graduate
 - c. Some college but no degree (took some courses but did not finish)
 - d. Postsecondary certificate (specialized training such as cosmetology, HVAC, or police academy)
 - e. Two-year college graduate (such as Pellissippi State Community College or Roane State Community College)
 - f. Four-year college graduate (such as UT or ETSU)
 - g. Graduate school (Beyond a 4-year degree such as a master's degree or doctoral degree)
 - h. I have no idea my father's level of education

5. Do you have any siblings who have already started or completed two-year or four-year college?
 - a. Yes
 - b. No
6. How long have you lived in this area?
 - a. Less than 1 year
 - b. 1-3 years
 - c. 4-6 years
 - d. more than 6 years
7. If you lived elsewhere, where did you live before moving here? (city & state)
8. What is your overall grade point average in high school? (unweighted)
 - a. A/A+ (4.00)
 - b. A- (3.67 – 3.99)
 - c. B+ (3.33 – 3.66)
 - d. B (3.00 – 3.23)
 - e. B- (2.67 – 2.99)
 - f. C+ (2.33 – 2.66)
 - g. C (2.00 – 2.23)
 - h. C- (1.67 – 1.99)
 - i. D or below (0 – 1.66)
9. How many honors, Advanced Placement, or dual credit courses have you taken in high school? (including any you are currently taking)
 - a. None
 - b. 1-2
 - c. 3-4
 - d. 5-6
 - e. 7-8
 - f. 9 or more
10. What do you plan to do this fall after graduating from high school?
 - a. Go straight to work
 - b. Join the military
 - c. Attend a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - d. Attend a two-year community college (such as Pellissippi State Community College or Roane State Community College)
 - e. Start at a two-year college and transfer to a four-year college
 - f. Attend a four-year college (such as UT or ETSU)
 - g. Other (please specify)

11. What do your parent(s) hope that you will do this fall after graduating from high school?
- Go straight to work
 - Join the military
 - Attend a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - Attend a 2-year community college (such as Pellissippi State Community College or Roane State Community College)
 - Start at a 2-year college and transfer to a 4-year college
 - Attend a 4-year college (such as UT or ETSU)
 - Other _____
 - I have no idea what my parent(s) hope that I will do this fall after graduating from high school
12. Within 5 years, what are your educational plans?
- To get a job immediately after high school and not pursue further education or training
 - To obtain advanced training by joining the military
 - To complete a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - To complete a two-year community college degree (such as Pellissippi State Community College or Roane State Community College)
 - To complete a four-year college degree (such as UT or ETSU)
 - To complete a four-year college degree and begin work on a graduate degree
 - Other (please specify)
13. Within 5 years, what are your parent's educational goals for you?
- To get a job immediately after high school and not pursue further education or training
 - To obtain advanced training by joining the military
 - To complete a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - To complete a 2-year community college degree (such as Pellissippi State Community College or Roane State Community College)
 - To complete a 4-year college degree (such as UT or ETSU)
 - To complete a 4-year college degree and begin work on a graduate degree (such as a master's degree or doctoral degree)
 - Other _____
 - I have no idea what my parent's educational goals for me are
14. How well do your plans for the future match up with the plans your parents have for your future?
- They don't match at all
 - They match a little
 - They match pretty well
 - They completely match

15. Have you already applied to a college?
- Yes
 - No
16. If yes, how many colleges have you applied to?
- 1
 - 2
 - 3
 - 4
 - 5 or more
17. What types of colleges have you applied to? (check all that apply)
- a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - A two-year community college (such as Pellissippi State Community College or Roane State Community College)
 - A four-year public university in Tennessee (such as UT or ETSU)
 - A four-year private college or university in Tennessee (such as LMU or Carson Newman)
 - A four-year college or university outside of Tennessee
18. Have you already been accepted to a college?
- Yes
 - No
19. If you have been accepted to a college, which type of school do you plan to attend?
- a technical school or specialized training program (such as TCAT, cosmetology, HVAC, or police academy)
 - A two-year community college (such as Pellissippi State Community College or Roane State Community College)
 - A four-year public university in Tennessee (such as UT or ETSU)
 - A four-year private college or university in Tennessee (such as LMU or Carson Newman)
 - A four-year college or university outside of Tennessee

Appendix E

Qualitative Responses: Support

Emotional Support
Encouragement Encourage me Encourage me Emotionally They want me to get a good job and encourage me to try until I succeed They encouraged me to go to school They push me to do my best My dad encourages me to go do what makes me happy. He supports that I want to be a journalist and writer Good job They tell me to achieve my goals They want me to succeed They are excited for me They say good job Motivational support They encourage me They believe in me Encouragement They will give me the positivity to get through college By tellin me that I need to do it and that they know I can They push me to be the best I can They encourage it They expect me to go and have faith in me going My parents tell me they can't wait to see what I become Encouraging They tell me I can make it They always express how proud they are of me My parents pray to God to give the knowledge and courage to go through high school and college Emotional support They have help me stay motivated They push me to do my best Loving me Supporting me Emotionally My mom pushes me to do better everyday even if it includes crying They say they are proud of me Encourage me to do well in school Promote a positive envrionment They tell me that I can do anything I want They encourage me to go the distance

They always have my back no matter what I decide Encouragement My parents also support me in my plans after high school by encouraging me to be the best person and student I can be and to get good grades They encourage me to do college related things Encourage me They encourage me to do good in high school They encourage me to get scholarships
General support Helping They help me get things done Help me They support me in all ways They just want what's best for me They let me talk to them about anything Do everything they can to help me get what I need They help me anyway they can My dad helps me as much as he can to get me through college My parents support me by allowing me to make decisions for myself They support my ultimate goals, dreams, and ambitions They will support me by guiding me through any struggles Help me out Doing whatever possible to get me into a college that can meet the objectives we are looking for Wanting me to do better in my future They want me to accomplish my goals Help me achieve it They are here for me at all times They support what I wanna do They think it is more than a good idea that I go to college Provide advice through college She doesn't expect me to go to a certain school Supporting me in any decision I make about college They believe in the decisions I make for myself They help me make decisions I'm unsure about They help me get to where I'm going after high school Tried to promote college any chance she got By telling to study hard and go to tutoring They told me to look for people that are willingly to help me find information They wanted me to go anywhere I could so long as I pursued furthering my education Open for options in my interest for college Help making decisions about the future My dad used to take an interest in my education
Agreement They like where I'm going to school They want me to go to college just as I wish to

They support my decision on the major I chase after
 Supporting career goals
 They want me to get a college education
 They agree with my choices
 They understand my love for music, and my desire to teach
 The place I want to go to college my parents want me to go there as well
 My parents want me to be an engineer as much as I do
 I am going to be a teacher, my mom and dad agree with this and support me in this decision
 They agree that my plans are a good fit for me
 They have made it clear that the school I have chosen to attend is the right place for me
 They support the college I want to go to and what I want to study
 They agree that I'm making a good decision
 Supporting me in my choice of college
 They allowed me to pick the college of my choice
 They push me to find the college for me and make sure I know and agree with the major I'm picking
 I told what I wanted to do after high school and they said ok
 They like my choice
 They believe in the decision

Concrete Support Tasks

College Planning Support

They helped me apply for college
 Help me research
 Ask about my plans
 They take me to college visits
 They helped me apply for college
 My parents are helping me fill out forms
 Mom says she is going to help me get moved into my college dorm
 They agree and help me apply with college
 They remind me of my meetings
 They help supply me with the info I need to continue my education
 They help me get my college stuff ready
 They toured colleges with me
 They push me to meet college scholarship deadlines
 Taking me to college orientation and stuff
 Toured school and helped schedule classes
 Helped enroll me in college
 Helped with class planning
 Helping me finish all college paperwork/plans
 They are helping prepare for college
 Helping with planning
 Help you get into college
 Help look into new majors

Help tour colleges
 Enrolling me
 They have helped me with my questions regarding applications
 They have helped me find scholarship applications
 Took me to view some colleges, and helped me get my applications ready
 They are helping me with my college
 They take me to college related events
 They've helped me search for the right college
 They've helped me decide what I'd like to major in
 Providing resources to find scholarships
 They encourage me to evaluate every school option I have
 They gave me advise to look for affordable colleges
 They have taken me on college visits
 My mother is always asking me where I am in my steps in progressing to college. Have I finished signing up for orientation? Have I sent in all the forms that are needed? Did I fill out enough scholarships? Etc.
 They helped me emensly with the application process
 They have helped me to explore future college options
 They have helped me find scholarships
 My grandmother takes me to my appoinments
 They help me fill out college applications
 They are helping provide me with the necessary things I'll need in college
 Helping me find jobs, internships, and all the college paper work
 They give me different options trying to find other schools with different majors that I would like
 They asked me what I want to do after high school
 They have taken me to visit the college of my choice
 My wonderful parents have spent hours helping me research colleges and plan visits to see every on I find interest in
 My parents have spent multiple weekends helping me find and apply for scholarships and grants for me to attend college
 They have gone with me to college visits
 Helping me fill out scholarship paperwork
 Take me to college visits
 Email the college I am going to attend about any questions I/we have

Financial Support

Money
 Paying for some
 They are buying books for college
 Paying for my education
 Pay for some
 Paying for college
 Helping with money
 They help me pay for college
 Save money
 Paying for anything I need

They are paying for my college
 They are helping me buy a car
 Giving helpful financial advice for the future
 You need money
 They are paying for my college
 They are helping me pay for my books
 Financial help
 Help you get a job
 They pay my care insurance
 Paying
 Paying
 My dad is giving me money weekly to help with food and gas because I can't work
 Help with money
 They say they will help me in expenses and getting where I need to be
 Financially
 Offering to pay tuition
 They are helping me pay for college
 Willing to pay for books
 My mom is always willing to help me pay for the extra fees that come with college. For instance, my orientation costs money and she helped me get the funds, even if it took a few of her paychecks
 They are helping me pay for it
 They are helping me pay for my schooling
 They are giving me money for my applications
 They help me with little payments in college
 Supporting me by helping me pay
 Financial aid through college
 They are helping pay for college
 They are willing to help me out with collage expenses
 Financially
 They do not expect me to work in college because they understand how stressed I will be 3 hours away from home
 My parents helped me pay for college
 They are going to help fund my education
 They pay for my application and other things
 My parents support my plans after high school by offering to pay a small portion of my tuition if I need it
 Financial support
 They have contributed to a matching scholarship with my college
 They are currently helping me with funds. Not the larger, college loan funds, but smaller things

Living Support

Let me stay at home
 Provide shelter
 They like that I'm living at home
 Letting me live at home until I graduate

They take me back and forth to my college

A place to live

My parents are will to help me stay with them through college

They will support me by giving me a place to live

Appendix F

Qualitative Responses: Incongruence

College Planning Differences
College vs. no college I'm joining the military Go straight to work Work instead of going to college I want a year break, they want me to go straight into it They want me to stay home for a year, I wish to go straight to college They want me to go to college and graduate and get a good job, I don't know if I want to attend college or not They want me to go to college, I'm not going to college I want to get a good job, my parents want me to go to college I wanted to take a semester off to see what career I wanted to go into, and save a little for college, and my mom didn't think that was a good idea Sometimes I think they don't even want me to go to college, but I want to After highschool I'd love to just work for a bit and then go to school but my parents want me to jump to it so I can start my career They don't agree with some of my college plans I want to go to college and be a fighter pilot, they want me to finish high school and give me the option to go to college or work full time After high school I want to wait a little while before going to college, they'd like me to go right away I do not want to go right into college They want me to work and only work
Major choice Want me to double major They don't want me to study Spanish They want me to study anything but Spanish but Spanish is what I want to study Interest in participating in the liberal arts They think I should major in an area more science and mathematics related rather than arts and humanities I am seeking an engineering degree, but , little to their knowledge, I have no intension of being an engineer. I am still seeking the degree I'm still not sure what I want to major They want me to go to school for accounting. I don't want to. Do not want me to go into film to support immigration and equality, they disagree with my ethics I have different goals and dreams that they think should be hobbies My mom wants me to have a theatre major
School choice They want me to go do a different school They want me to go to ETSU

They want me at LMU They don't care which college I go to where as I wish to go to LMU The order of schools I want to go to Different college How and where I transfer after my first 2 years of college I want to go to school for a while to help me decide what I ultimately want, but they want me to pick one I want to go to SIU, but my parents say otherwise My parents also wanted me to attend Pellissippi and I'm going to Maryville College I want to go to a university but they want me to go to a smaller school The school they want me to go to may not be the same My parents wishes for me regarding my plans after high school differ from mine in that they are a little more close minded in the options I have for colleges to attend
Degree level They want me to go to college for a long time My wishes are to go to a 2 year college and certification while my parents want me to go back to college after the 2 years They do not want me to go to school for 8 years I wanted to do cosmetology school At first they just wanted me to get my associates degree My parents want me to wait to get my doctorate My parents want me to start at a community college. I want to go straight to a four year college My parents want me to pursue a masters degree, when I would like to pursue a doctorate degree
In college activities My dad does NOT want me to study abroad How I spend my time at college i want to explore and experience life they want me to study more My dad expects me to party and I do not plan to do that I want to invest all my time into education My step dad wants me to football

Financial Choices
Use of scholarship They want me to use TN promise They've always wanted me to take the two-years free My mom wanted me to do TN promise, but I knew that I wouldn't travel 25 minutes everyday to go to college and waste someone else's money At first my Mom really wanted to take the TN Promise deal. I didn't want to, and we had a few arguments over it. However, once I proved to her I could get enough scholarships she approved of me going to a four-year university I wish they would have been a lot more helpful with scholarships
Cheaper school I would prefer to attend UTK, but they would rather I go to UTC or MTSU where tuition is cheaper

They want it to be cheaper but I just want to go to the best school for my major KP matter the cost I feel like I could go to a cheaper school
General finances Money They don't think it's possible for me to pay for college To not be broke

Career Planning Differences
Career field choice My parents do not like my career field My mom also wanted to work in the NICU but I want to work in the ICU I want to be in the WWE. They don't want me to be They want me to go into the medical field, I want business They want me to jump into becoming an anesthesiologist My stepmom wants me to be a doctor or something and I want to travel and be a journalist I want to be a nurse and a hippie. They don't really mix. Different careers They do not want me to become a doctor Well my mom for one would wish that I would go into the medical field or be a lawyer. They want me to consider other careers when I have one in mind They want me to enter the medical field, but I am unsure Maybe a difference on where ill hope to get a job My parents want me to become a teacher alone. While I want to not only be a teacher but I want my art and music degree I want to get my degree in teaching and music. They only want me to do teaching Become a park ranger Different career
Career values My parents want me to have money, I want to do something I love, they want what gets me by They want me to make a lot of money, I don't care how much I make so long as I love my job My parents want me to go the easy route, I want to do whatever it takes to be successful My parents idea of success is how much money you make, but that is not a priority to me
Working while in college They don't want me to work first semester I want to keep my job and they want me to find a new one I would love to work through college yet they disagree I want to work during college and they do not want me They want to focus mainly on school, when I need to focus on work as well

Location During College
Moving out Mom wants me to stay I play on moving out sooner than they want I wish to move out while they want me at home I would like to begin looking for my own place where as they don't want to see me leave They want me to stay at home They do not want me to move away from home I may or may not have to move away from home I want to move out My parents don't want me moving out I do not wanna come back home and they want me to I wanna move to the beach and my parents do not think thats a good idea I probably want to move out sooner than they think i should My parents wanted me to stay home during college. I don't want to stay home. Where I'll live I want to move to go to college I would prefer to live alone
Distance I'm moving far away They don't like that it's 2 hours away They are similar, I really want to go to a far away college but they want me to stay close to them. They do not think it would be a good idea to move far from home I want to move to a different state, they'd like me to stay in Tennessee They want me to live with them, and i want to live far away They want me to stay near this area and not leave My parents did want me to be closer to home but now they don't mind Want me to stay close to home, but I want to go out of state My parents want me to be closer to home My parents want me to stay close to home for college. I do not want to stay close to home
Living on campus I'm staying on campus and my parents want me to stay home My parents don't appeal to the thought of me living on campus, yet if I had the money, I would love to get the full college express that comes with dorm life Their wishes also differ from mine in that hey want me to stay at home while I want to live on campus

Vita

Anna Lora Taylor received her Bachelor's of Science in Human Services from East Tennessee State University. After completion of her Bachelors she worked as a case manager for adults with intellectual and developmental disabilities. She then completed her Master's degree in Mental Health Counseling at Austin Peay State University. Soon after, she moved to Knoxville, Tennessee where she began the Counselor Education Ph.D. program at the University of Tennessee. Her research interests include college access, career development, and rural Appalachian youth.