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Identifying Attributions and Predictors of High School Dropout in Rural Youth: A Mixed Methods Approach

Karla Swayngim Reed

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IDENTIFYING ATTRIBUTIONS AND PREDICTORS OF HIGH SCHOOL DROPOUT IN RURAL YOUTH: A
MIXED METHODS APPROACH

by

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DEDICATION

This work is dedicated to three formidable women who taught me through word and action to be resilient, resourceful, and have faith - my grandmother, Catherine Swayngim, my guela, Marta Gillespie, and my mother, Sylvia Swayngim.

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ABSTRACT

Graduating high school is an important educational milestone that is related to better life outcomes; however, high school dropout remains an issue in the United States (US). This mixed methods study began with a qualitative stage using attribution theory to identify the factors rural youth perceive as responsible for their decision to drop out of high school. Focus groups were conducted with youth from a rural area in South Carolina (SC). Seven themes were identified across the two categories of Internal and External Focus. Internal Focus themes included: (a) ability/self-efficacy, (b) effort, (c) plans for the future, and (d) other priorities. External Focus themes included: (e) parents and home life, (f) school environment and administration, and (g) teachers. The quantitative stage used these themes to inform selection of items from the Education Longitudinal Study of 2002 (ELS:2002). Logistic regression examined the odds of high school completion based on the selected items from the ELS:2002 data, as well as demographic variables including sex, race/ethnicity, and socioeconomic status (SES), among a national sample of urban, suburban, and rural youth. Sex, race/ethnicity, and SES were related to high school completion for the full sample. SES, class preparation, and parental involvement were significantly associated with high school completion for urban students. For suburban students, sex, race/ethnicity, SES, math self-efficacy, teacher-student relationships, and parental involvement were related to high school completion. Race/ethnicity and SES were related to high school completion for rural students. Implications, limitations, and future research are discussed.

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LIST OF ABBREVIATIONS

CI.....	Confidence Interval
ELS:2002	Education Longitudinal Study of 2002
MGLS:2017	Middle Grades Longitudinal Study of 2017-18
NCES	National Center for Education Statistics
OR.....	Odds Ratio
SC.....	South Carolina
SES.....	Socioeconomic Status
US	United States

CHAPTER 1

INTRODUCTION

High school dropout is an overarching concern in the United States (US), especially considering the negative impact of dropout on employment, earnings, use of public assistance, and even likelihood of criminal behavior (Bonnie et al., 2015; Christle et al., 2007). Recent estimates (Bureau of Labor Statistics, 2021) show persons without a high school diploma earn over \$700 per month less than persons with a high school diploma, and the unemployment rate is higher for persons who do not graduate high school (8.3%) compared to persons who do (6.2%). Additionally, lower educational attainment is associated with lower life satisfaction, health, and longevity (Meeks & Murrell, 2001; Phelan et al., 2004; Salinas-Jimenez et al., 2011). With nearly one million students dropping out of high school each year (Alliance for Excellent Education, 2015), reducing dropout rates is an immediate need in educational research.

Previous research shows dropout rates vary by demographics, such as race/ethnicity, socioeconomic status (SES), and geographic locale. Persons of minority races have higher dropout rates than whites, and persons living in poverty are more likely to drop out of high school when compared to persons living above the poverty threshold (Rumberger & Lim, 2009). Mixed results have been found on whether dropout rates differ by geographic locale with some research indicating a higher dropout rate in rural areas when compared to suburban and urban areas (Roscigno & Crowley, 2001), and rural youth in high poverty have previously been found to have the highest dropout rate

in the country (Provasnik et al., 2007). Yet, other research has found this difference to be a result of measurement issues and how rural or dropout are defined (Reeves & Bylund, 2005). Additionally, one study determined differences in rural and non-rural dropout rates are narrowed when certain family factors are considered (Jordan et al., 2012). Despite varying results on whether dropout rates differ by geographic locale (Jordan et al., 2012; Provasnik et al., 2007; Roscigno & Crowley, 2001), the issue remains that the national dropout rate needs to be lowered, and effective interventions may differ by locale. For example, youth in rural communities face challenges such as decreased educational and occupational aspirations and attainment, high poverty levels, geographic isolation, and lower school quality (Byun et al., 2012a; Byun et al., 2012b; Irvin et al., 2012; Johnson et al., 2014; Meece et al., 2014; Meece et al., 2013).

Despite the slight decline in the rural population over the past decade (Henderson, 2021), South Carolina (SC) remains in the top 20 most rural US states (US Census Bureau, 2021b). Furthermore, just over 40% of SC schools are in rural areas, and over 20% of rural students in the state live in poverty (Showalter et al., 2019). This may seem expected, as SC has the 9th highest poverty rate in the US (US Census Bureau, 2021a), but it does not explain why rural SC schools only receive 17% of state education funds (Showalter et al., 2019). According to Showalter et al. (2019), “Instructional spending and teacher salaries are well below national averages” (p.5). Additionally, SC has some of the widest gaps in educational outcomes, with national test scores and graduation rates lower for rural students than for their non-rural peers (Showalter et al., 2019). In fact, as recent as 2009, SC was estimated to have the highest rural dropout rate in the US, with only 52.3% of rural youth completing high school that year (Johnson & Strange, 2009).

Due to the high percentage of rural schools in SC and the need for improved educational outcomes in the state, examination of rural SC youths' perceptions of factors influencing their decision to drop out of high school is warranted.

As rural youth in high poverty areas have the highest dropout rate in the country, health sciences research on the attributions of this population may offer some initial insights. Research on socioeconomic disparities in health behaviors has shown persons in lower SES levels are more likely to hold an external locus of control concerning health behaviors as evidenced by engaging in unhealthy behaviors, holding stronger beliefs about the influence of chance on health, thinking less about the future, and having lower life expectancies (Pampel et al., 2010). Additionally, research on beliefs about luck has shown persons with lower SES are more likely to believe in the power of luck and less in their own power (Beckert & Lutter, 2012). Because the rural communities with the highest dropout rates are also those with high poverty levels (Provasnik et al., 2007), an external locus of control may be expected. These views about powerlessness, chance, and luck also may be more pervasive in rural communities which tend to have high social cohesion, with shared values and decision-making regarding areas such as healthcare or education (Deggs & Miller, 2011; Nelson et al., 2015). Therefore, it may be reasonable to speculate that rural youth in high poverty who drop out of high school may be attributing their failure in school to attitudinal factors of viewing achievement and success as externally or situationally related and, thereby, out of their control. In this respect, the use of attribution theory, a theory of motivation, could be valuable in understanding more about why rural youth in poverty have such an elevated high school dropout rate.

1.1 Purpose of Research

The purpose of the current study is to fill the knowledge gap on why rural students may drop out of high school. While previous rural education research has identified several factors as related to the educational attainment of rural youth (Crockett et al., 2000; Demi et al., 2010; Hardre & Sullivan, 2008; Irvin et al., 2012; Irvin et al., 2011), little work has examined rural high school dropout or completion in particular. Furthermore, specific exploration of factors related to the rural dropout rate in SC is limited (Strange et al., 2012), and input from rural students as to their perceptions of factors related to dropout is scarce. To address these gaps, the current study will employ a mixed methods approach. The first stage of the study will include qualitative exploration of attributions for high school dropout as identified by rural SC youth who left high school and enrolled in adult education. The qualitative stage will then inform the quantitative stage of the study in which attributions and additional predictors identified in the rural SC sample will be used to examine differences between rural youth who graduate from and who drop out of high school in a national dataset. This mixed methods approach will allow the exploration of the role that attributions and other factors may have in dropout among a local population that, as mentioned, has one of the highest dropout rates in the country (i.e., rural SC youth) and then further examine how these factors may be involved in dropout among a national sample of youth from urban, suburban, and rural geographic locales.

1.2 Research Questions

Qualitative Stage

1. What are the primary attributions for academic success and failure, including failure in the traditional high school setting, as defined by rural youth in SC who have dropped out of high school and enrolled in adult education?
2. Do the attributions identified by rural youth in SC, including social attributions, align with attribution theory?
3. What other themes emerge as impacting the educational trajectory, specifically the decision to drop out of high school, of rural SC youth who dropped out of high school and enrolled in adult education?
4. Do any themes from the qualitative portion align with variables contained within the Education Longitudinal Study of 2002 (ELS:2002)?

Quantitative Stage

5. Using the themes obtained through the qualitative portion of the study with a national sample (ELS:2002 data), how do rural students who graduated from high school differ from those who dropped out of high school?
6. Do the themes obtained through the qualitative portion differ for the full sample of the ELS:2002 data and across geographic locale (i.e., urban/suburban/rural) in predicting high school dropout?
7. Are there targetable factors that could be the focus of future research to reduce the likelihood of dropping out of high school for rural youth?

1.3 Theoretical Framework

Attribution Theory

The current study will draw upon attribution theory to help clarify the cognitive motivational factors that may be related to rural high school dropout. Attribution theory states motivation and outcomes are related to the causal attributions one gives previous successes and failures (Graham & Williams, 2006; Weiner, 1986; Weiner, 2010). The four most common attributions are ability, effort, task difficulty, and luck. Ability involves the level of self-perceived competence. Effort is the amount of work one puts into a task and preparing for a task. Task difficulty refers to the degree of difficulty one perceives a task to have. Luck is the idea that success or failure is due to chance.

These attributes can be further distinguished by three dimensions: locus (internal/external), controllability, and stability. Locus refers to whether the cause (or attribution) originates internally (within the person) or externally (outside of the person). Controllability is the extent to which a person feels he/she is able to control the cause. Stability describes the extent to which a cause is either temporary or permanent. Within these dimensions, ability is distinguished as internal, uncontrollable, and stable. Effort is also internal and stable but is controllable. Task difficulty is an external, uncontrollable, stable factor, while luck is viewed as external, uncontrollable, and unstable. Table 1.1 summarizes the attributes by dimensions.

Table 1.1

Attribution Theory

Locus	Internal		External	
	Stable	Unstable	Stable	Unstable
Uncontrollable	Ability		Task Difficulty	Luck
Controllable		Effort		

Previous research on attribution theory suggests social attributions, specifically the influences of family, teachers, and peers, also affect motivation and outcomes (Mcclure et al., 2011; Weiner, 2000). These social attributions are part of an interpersonal theory of motivation, in which the reactions of others effect performance and achievement and vice versa (Weiner, 2000). Social attributions may be especially impactful for youth in rural areas who express a strong attachment to their family and community (Theodori & Theodori, 2014).

Within attribution theory, views of intelligence may also contribute to attributions for academic failure or success. An entity theory of intelligence views intelligence as fixed and stable; whereas, an incremental theory of intelligence views intelligence as malleable and able to be increased with effort (Dweck & Leggett, 1988). A large body of research has explored the impact of theory of intelligence on academic achievement and found an incremental theory of intelligence is related to higher achievement and achievement goals (Blackwell et al., 2007; Da Fonseca et al., 2004; Dinger & Dickhauser, 2013). Conversely, an entity theory of intelligence is more commonly associated with the belief that circumstances are not within one's control and an increased likelihood of giving up (Dweck & Leggett, 1988). This notion of external control as a contributing factor in academic motivation aligns with attribution theory.

1.4 Important Terms

For the purposes of the study, the following terms are defined as follows:

- Rural: According to the National Center for Education Statistics (NCES), a rural area is either inside or outside a metropolitan statistical area (NCES, 1999).

Although the NCES revised the locale code system in 2006, the definition given here was in use at the time of the baseline ELS:2002 data collection.

- Dropout: A dropout is considered a student who left the traditional high school setting and either did not return to school or enrolled in alternative education, such as an adult education program.
- ELS:2002: The NCES conducted the ELS:2002 “to monitor the transition of a national sample of young people as they progress from 10th grade through high school and on to postsecondary education and/or the world of work” (NCES, 2004, p. 7). Respondents to the ELS:2002 include students, parents, teachers, principals, and librarians. Follow-up surveys were conducted in 2004, 2006, and 2012. The current analysis uses student-level data from the baseline data collection and the 2006 follow-up.

1.5 Significance of the Study

Knowledge from this study will be used to help understand, predict, and improve educational outcomes of rural youth. Rural youth, especially those living in poverty, continue to drop out of high school at elevated rates (Provasnik et al., 2007). This study seeks to understand better the particular factors rural youth perceive as being responsible for their decision to drop out of high school. In turn, understanding these factors will help in identifying predictors of high school dropout in rural youth. Finally, if modifiable factors are identified as predictive of rural high school dropout, these factors can be targeted in developing rural dropout prevention programs and interventions.

In addition, the possibility for social change exists if high school dropout rates are decreased in rural areas. Job prospects and earnings are lower for high school dropouts,

while use of public assistance and criminal behavior are more likely (Bonnie et al., 2015; Christle et al., 2007). With high poverty levels already prevalent in rural areas (Housing Assistance Council, 2012), an increase in high school graduates could have a positive financial impact on rural communities. Enhanced socioeconomic circumstances could lead to greater life satisfaction, health, and longevity (Link & Phelan, 1995; Meeks & Murrell, 2001; Salinas-Jimenez et al., 2011).

CHAPTER 2

LITERATURE REVIEW

The following chapter first outlines literature regarding predictors of high school dropout in the general population, then discusses challenges faced by rural youth which may be related to dropping out of high school. Next, literature is reviewed on the use of motivation theory to examine high school dropout, followed by a discussion of literature supporting the use of attribution theory in this study and a description of preliminary research using attribution theory in a sample of rural youth who dropped out of high school. Finally, limitations in the literature are considered.

2.1 Predictors of High School Dropout

Several individual, school, and family factors are related to high school dropout. Salient individual factors include background (demographics), behaviors, and educational performance (Rumberger, 2011). Demographic factors, such as being male, from a minority race, and from a low socioeconomic background, have consistently been associated with dropping out of high school (Rumberger & Lim, 2009). Lower engagement and deviant behavior increase the likelihood of dropping out (Rumberger, 2011). Educational performance indicators (low grades, retention, failed classes) have been especially pertinent in predicting who will drop out of high school (Hammond et al., 2007; Neild & Balfanz, 2006; Rumberger, 2011). Several studies have noted the importance of teacher-student relationships in academic achievement and engagement (Decker et al., 2007; Klem & Connell, 2004; Ryan & Patrick, 2001) and, more

specifically, as related to the decision to drop out of school (Allensworth & Easton, 2007; Christle et al., 2007; Croninger & Lee, 2001; Davis & Dupper, 2004). Family relationships are just as influential, as family mobility, family disruption, and family commitment to education all play a role in educational outcomes (Englund et al., 2008; Gasper et al., 2012; Kirk et al., 2011; South et al., 2007). Furthermore, family responsibilities, such as becoming a parent or having to work, increase the likelihood of dropping out (Gleason & Dynarski, 2002; Lee & Staff, 2007; Warren & Lee, 2003).

While all of these factors have been significantly associated with high school dropout, no single factor is the best predictor of dropping out of high school (Hammond et al., 2007), although some research suggests educational performance may be the most influential in the decision to drop out (Rumberger, 2011). Across the literature, risk of high school dropout is related to an interconnected network of multiple factors (Jimerson et al., 2000).

2.2 Challenges of Rural Youth

The previous section on predictors of high school dropout sheds light on factors related to high school dropout in the general population; however, the literature is lacking in examination of rural populations. Strange et al. (2012) postulate reformers and policymakers often focus on urban rather than rural education because they are frustrated and confused by the geographical dispersion, small and decentralized institutions, isolation, and cultural conservatism of rural communities. Yet, the issue remains that rural youth, especially those living in poverty, continue to drop out of high school at elevated rates (Provasnik et al., 2007). Due to the limited research on rural education as a whole (Strange et al., 2012), we do not have the full picture of what is involved in rural

high school dropout. We do know that high school completion is directly related to aspirations for educational and occupational attainment (Bushnik et al., 2004; Mikiewicz, 2011; Polidano et al., 2013). For rural youth, educational and occupational aspirations may be negatively impacted by obstacles such as low SES, perceived parental educational expectations and academic involvement, geographic isolation, and school quality and closures (Buzzard, 2016; Byun et al., 2012b; Irvin et al., 2012; Johnson et al., 2014; Meece et al., 2014; Prater et al., 1997; Provasnik et al., 2007).

Socioeconomic status, commonly measured by a combination of education, income, and employment (American Psychological Association, 2007), is associated with educational aspirations (Dubow et al., 2009) and high school completion (Polidano et al., 2013). In terms of education, postsecondary educational attainment is lower among rural parents than suburban and urban parents (Provasnik et al., 2007), with only 20% of rural parents having a bachelor's degree compared to 34% and 36% among suburban and urban parents, respectively (Byun et al., 2012a). Poverty rates are higher for rural youth as compared to their suburban and urban counterparts (Lichter & Johnson, 2007; Miller & Weber, 2014), and, as previously discussed, rural youth in high poverty have consistently been found to have the highest high school dropout rate in the country (Provasnik et al., 2007). Furthermore, the unemployment rate in rural areas (6.6%) exceeds the overall national unemployment rate (5.5%; (US Department of Agriculture, 2014). Thus, for rural youth, lower SES levels are likely associated with the rural dropout rate and may contribute to the idea of higher educational attainment being beyond one's control (Dweck & Leggett, 1988).

Perceived parental educational expectations and academic involvement are associated with educational aspirations and attainment in the general population (Hill et al., 2004; Kirk et al., 2011). This association also holds true for rural youth, as Byun et al. (2012b) found the postsecondary educational expectations of rural parents were significantly related to students' educational aspirations, even after controlling for SES, grade level, college proximity, and rural locale. Furthermore, when parents are perceived as having low educational expectations and/or appear to place low value on schooling based on limited academic involvement, educational attainment is also likely to be lower (Bushnik et al., 2004; Israel & Beaulieu, 2004; Israel et al., 2001). Specifically, Israel et al. (2001) found youth were more likely to stay in school when they perceived their parents as academically involved and having high educational expectations. Despite the importance of parental expectations and involvement, parental educational expectations have been found to be lower in rural areas (Cobb et al., 1989; Provasnik et al., 2007), and rural parents talk less with their children about school and interact with teachers less frequently than suburban or urban parents (Prater et al., 1997).

For many rural youth, geographic isolation may be especially limiting in terms of educational aspirations and attainment. For example, urban residency is a more significant predictor of staying in school than rural residency (Israel et al., 2001). A possible explanation for this association between geographic isolation and educational attainment is that postsecondary education may not be needed for many jobs in isolated rural communities (e.g., agriculture, manufacturing, resource extraction, or service); therefore, rural youth are less likely to aspire to professional and technical jobs requiring postsecondary education due to lack of familiarity with such occupations (Haller &

Virkler, 1993). For some rural youth, desired educational and occupational opportunities may not be available in their area, leading them to lower their aspirations rather than move away from home (Howley, 2006). Earlier research indicated youth in rural areas may place more value on their connections to place, people, and rural lifestyle instead of material success and related goals (e.g., finishing high school, obtaining postsecondary education, becoming wealthy; Howley, 2006; Petrin et al., 2011). Yet, in recent years, the expectation has increased that rural youth will leave their home communities (Looker, 2021), and a large portion of youth remaining in the community are jobless and not in school, for which the term youth disconnection has been coined. According to a report from the Social Science Research Council, youth disconnection is higher in rural counties than urban and suburban counties (Lewis, 2021).

Geographic isolation and economic opportunity impact school quality and result in school closures. Many rural schools, faced with persistent poverty, lack the resources to engage students. Some research indicates access to guidance counselors and postsecondary preparation activities are lower for rural youth (Griffin et al., 2011). For example, rural youth are less likely to visit college campuses or engage in career exploration. Additionally, rural schools have difficulty recruiting highly effective teachers (Monk, 2007), and, despite the increase in the use of technology, rural communities still lag behind their non-rural counterparts in facilitating technology use in schools due to lack of funding (Alliance for Excellent Education, 2010). Lack of funding also leads to rural school closures and consolidations, which have been associated with rural high school dropout due to excessive commutes and bus rides, greater anonymity, and reduced extracurricular participation (Lewis, 2003). Furthermore, a sense of

community connection is lost when a rural community loses a school (Buzzard, 2016). For rural schools to be successful, they need to provide qualified teachers, supportive resources, and opportunities to connect with the community (Barley & Beesley, 2007).

2.3 Motivation Related to High School Dropout

As a basis for using attribution theory to examine rural high school dropout, it is important to explore previous research on theories of motivation and intent to drop out of high school. Expectancy-value theory emphasizes the importance of ability beliefs, expectations, and subjective task values in academic success (Wigfield & Eccles, 2000). Fan and Wolters (2014) found the intrinsic value students placed on math and English was indirectly related to dropping out of high school through their educational expectations. Furthermore, a mediation effect was found in which educational expectations mediated the relationship between math and English ability beliefs and dropping out of high school. Academic and behavioral engagement, which are considered motivational pathways to accomplishing educational goals (Reeve, 2013), have also been found to be associated with a lower likelihood of dropping out of high school (Fall & Roberts, 2012). Self-determination theory proposes three psychological needs, autonomy, competence, and relatedness, which must be supported to foster motivation. In a longitudinal study of 426 high school students, Alivernini and Lucidi (2011) examined the ability of self-determined motivation to predict intent to drop out of high school. They found students' perceptions of teachers' autonomy support to be the best predictor, while self-efficacy greatly impacted level of self-determined motivation. In a unique study with a sample of rural students, Hardre and Reeve (2003) used self-determination theory to explore the motivational factors underlying rural students' decisions to either persist in or

drop out of high school. Autonomy support was found to predict motivation and perceived competence, which, in turn, predicted the intention to either persist in or drop out of high school in this rural sample. While this literature supports the use of certain motivational models to predict and reduce high school dropout, little has been done in rural samples, despite the pressing need to decrease the rural dropout rate, and the applicability of attribution theory, in particular, has not been fully explored.

2.4 Relevance of Attribution Theory to Rural Sample

Educational research using attribution theory has shown support for the addition of social attributions (Mcclure et al., 2011; Weiner, 2000). Because of the strong attachment to family and community in rural areas (Theodori & Theodori, 2014), social attributions may be especially relevant to rural youth. Consistent with this, Zabloski and Milacci (2012) conducted a phenomenological study of seven rural adults who dropped out of high school despite being identified as gifted during their elementary or secondary school career. Two themes emerged from the data related to dropping out of high school: Influence of Relationships and Influence of Teachers. Within Influence of Relationships, participants revealed experiences with relational traumas (e.g., parental divorce, social rejection) and relational losses (e.g., death of a parent, moving away from friends), which “birthed a change in their attitude regarding school” (Zabloski & Milacci, 2012, p. 182). The Influence of Teachers was apparent in how participants focused less on academics and more on “who delivered the academics, how they delivered it, and why they liked or disliked the person doing so” (Zabloski & Milacci, 2012, p. 187). However, despite the value participants placed on relationships with teachers, they also indicated most teachers did not appear to care about “whether they passed, failed, attended, or simply dropped

out” (Zabloski & Milacci, 2012, p. 186). Both themes uncovered by Zabloski and Milacci offer support as to the value of social relationships and potentially social attributions in the lives of the rural students, especially as related to their decision to drop out of school.

In considering the educational attainment of rural youth, perhaps one of the most relevant features of attribution theory is the idea that successes and failures may be attributed to either internal or external causes. Internal causes are more likely to be within one’s control, while external causes are often uncontrollable. Some have proposed a self-serving bias exists within attribution theory (Heider, 1976; Mezulis et al., 2004); that is, success is attributed to internal causes and failure is attributed to external causes. Such a bias would be protective of self-esteem (Mezulis et al., 2004). Furthermore, although ability is considered an internal attribution, many view ability as stable and beyond one’s control, which can lead to feelings of helplessness or hopelessness (Blackwell et al., 2007; Dweck & Leggett, 1988). For youth in high poverty, external and uncontrollable attributions of academic success and failure may be especially damaging, as suggested by research on health behaviors and luck (Beckert & Lutter, 2012; Pampel et al., 2010). Although not directly related to youth in poverty, Dweck and Leggett (1988) proposed a similar interpretation, “Thus, if one perceives oneself to be basically and unalterably incompetent...then control attempts will be perceived as futile, or at best their impact will be viewed as determined by chance” (p. 268).

2.5 Preliminary Research

To investigate the applicability of attribution theory to rural high school dropouts, I conducted a qualitative pilot study with a sample of 17 students who dropped out of high school and enrolled in adult education in a rural county of SC. Participants were

between the ages of 18-25, with an average age of 19.5 years, and were predominantly White (58.8%). They completed a self-report questionnaire including 15 open- and closed-format items on demographics, attributions for academic success and failure, why they left high school, why they enrolled in adult education, and what they viewed as the most important reasons students leave high school in their town. Open-format data were coded in NVivo 10 using an initial coding framework based on attribution theory (ability, effort, difficulty, luck, family, teachers, and peers). However, themes were considered and added as they emerged from the data. The following nine themes resulted from the open-format responses: (a) Ability, (b) Effort, (c) Task Difficulty, (d) Luck, (e) Parents/Family, (f) Teachers/Staff, (g) Peers, (h) General Encouragement, and (i) Other Priorities. Although few responses fell within the Luck theme, statements attributing failure or success to external factors, such as teachers, family, peers, or task difficulty, were highly prevalent. General Encouragement was another theme that heavily focused on outside influences. Many participants felt individual encouragement was seriously lacking in their lives and the lives of students similar to them. The most prevalent theme endorsed by participants was the external social attribution of teachers and staff. Participants rarely attributed success to their teachers but frequently viewed teachers or staff as the cause of academic failure. When asked what was needed in the community to help other students stay in school, one participant summed the theme up best with, "Teachers that believe in their students and give encouragement even if they are difficult students. We need more teachers that care!" Although not as frequently endorsed, academic success and failure were attributed to ability by some participants, with statements such as, "me being smart," "lack of confidence," and "I was never really good

in school.” These ability attributions are in line with an entity (stable) theory of intelligence. While these results only give minor support to the notion that rural youth in high poverty frequently endorse external attributions for academic failure, they do show potentially adequate support for the applicability of attribution theory to rural high school dropouts who have enrolled in adult education.

2.6 Limitations in the Literature

As previously stated, little has been done to investigate rural high school dropout or completion. National studies have been conducted using objective measures on reasons students drop out of high school, although such studies do not specifically examine the role of geographic locale or attribution theory, especially among rural youth. In a previous dissertation which did consider geographic locale, Tyler (2011) explored the use of Bronfenbrenner’s ecological systems theory in predicting high school dropout while also analyzing dropout attributions (reasons for dropping out) from the National Educational Longitudinal Study of 1988. Tyler did not determine that geographic locale was a significant predictor of high school dropout when other predictors were controlled; however, she did find that dropout attributions can be classified within the microsystem of ecological systems theory. The microsystem refers to the environmental influences closest to a person’s daily life, such as home, school, and work, and includes family, peers, and teachers. In that regard, Tyler’s findings are relevant to the use of social attributions in the current study. Important to note as a limitation is that, although the study referred to reasons for dropping out of high school as attributions, attribution theory, specifically, was not examined.

Attribution theory was used to inform an international qualitative study (Chinyoka, 2014) on secondary school dropout among students in Zimbabwe. Although attribution theory was the theoretical framework for the study, the results were not tied back to attribution theory. For example, the authors found causes of school dropout could be summarized by four themes: poverty/financial problems (e.g., lack of funds for school fees and materials, forced to work), unpredictable home environment (e.g., death of parents, divorce, neglect), student related factors (e.g., disciplinary problems, illness, teen pregnancy/parenthood), and school related factors (e.g., school safety, teacher-student relationships). However, the authors did not explain how these themes were related to attribution theory. Additionally, the generalizability to high school dropouts in the US was likely limited.

Another limitation in the literature is the lack of input directly from rural students as to their perceptions of factors related to dropout. Only a handful of qualitative studies examining rural dropout are available in the literature, but, again, their generalizability may be limited. For example, the qualitative study by Zabloski and Milacci (2012) included only gifted rural individuals. Furthermore, the majority of research using a qualitative approach to examine rural dropout has been international (Chinyoka, 2014; Derdar, 2014; Oruko et al., 2015) and may not be generalizable to students in the US. With most research on rural educational attainment stemming from large, national datasets, a mixed methods approach utilizing qualitative and quantitative stages could be useful in illuminating the primary attributions and factors related to rural high school dropout.

2.7 Summary

Various predictors of high school dropout have been identified (Rumberger, 2011), some of which may be more pertinent to rural youth than others. Rural youth face many challenges in terms of education, which result in decreased educational attainment and even high school dropout (Byun et al., 2012a; Byun et al., 2012b; Irvin et al., 2012; Johnson et al., 2014; Meece et al., 2014; Meece et al., 2013; Provasnik et al., 2007). Because research has shown a connection between lower SES and an external locus of control concerning health behaviors, rural youth in high poverty may be attributing failure in school to factors outside of their control. Therefore, attribution theory may be relevant in examining the rural dropout phenomenon (Reed, 2016). Literature is lacking in terms of research exploring attributions for rural dropout and regarding qualitative research.

CHAPTER 3

METHODS

3.1 Restatement of Purpose

Previous research supports the use of motivation theories in explaining and possibly alleviating the rural dropout phenomenon. More specifically, the application of attribution theory and attribution retraining has potential benefits for rural youth in danger of dropping out of high school (Reed, 2016). Understanding more about why this phenomenon occurs is a vital first step in reducing the rural dropout rate. Therefore, the current study examined attributions for high school dropout, as identified by rural students in SC who dropped out of high school, which, in turn, informed exploration of a national dataset to identify differences between urban, suburban, and rural youth who graduate from and who drop out of high school.

3.2 Research Design and Questions

The current study employed a sequential exploratory mixed methods design, in which the initial qualitative stage informs the second quantitative stage (Creswell & Plano Clark, 2011). This two-stage approach included: 1) a focus group to elicit perceptions of attributions and other factors related to high school dropout in a sample of rural SC youth who dropped out of high school and enrolled in adult education; 2) examination of rural youth in ELS:2002 baseline data to identify relationships between attributions and other factors identified in the qualitative stage and the odds of graduating from high school.

Rationale for Research Design

As noted above, a sequential exploratory design was used in the current study. Although previous research has identified multiple factors as related to high school dropout (Rumberger, 2011), limited research is available specifically addressing rural high school dropout or completion. Therefore, it is necessary to first qualitatively identify the areas of importance as defined specifically by rural youth who have dropped out of high school. The qualitative stage ensured identification of the primary attributions and factors related to rural high school dropout, from the perspective of rural SC youth who dropped out of high school and enrolled in adult education. The state of SC, in particular, has been estimated to have over 40% of its schools in rural areas, and SC rural students have a lower graduation rate than their non-rural peers (Showalter et al., 2019), making SC an excellent choice for in depth exploration of rural high school dropout. Second, the quantitative stage further tested elements of attribution theory and allowed for generalizing the qualitative results to a larger sample (Plano Clark et al., 2008).

Lending support to this mixed methods approach, Ritchie (2003) described the use of qualitative research to inform quantitative enquiry:

“A traditional role for qualitative research has been to help in devising areas of questioning for statistical study. This is particularly valuable in studies where the subject matter under investigation is new or underdeveloped and where qualitative methods can help to define terminology concepts or subjects for investigation....

Preliminary research can therefore help to identify the relevant variables for inclusion and indicate what kinds of association between them might be sought”
(p. 40).

This description is in line with the sequential exploratory design used in the current study. In particular, a sequential exploratory design was used here to identify important variables to study quantitatively when the variables are unknown (Plano Clark et al., 2008).

Rationale for Research Questions

This study addressed seven important research questions that will generate new knowledge to help understand, predict, and ultimately enhance educational outcomes of rural youth.

1. What are the primary attributions for academic success and failure, including failure in the traditional high school setting, as defined by rural youth in SC who have dropped out of high school and enrolled in adult education?

Rationale: Preliminary research using open-format survey data indicated attribution theory may be applicable to rural youth who drop out of high school. The current study will implement a focus group to receive more in-depth perspectives than is possible with a brief open-format survey.

2. Do the attributions identified by rural youth in SC, including social attributions, align with attribution theory?

Rationale: Because of the impact of the rural community, it is important to confirm if social attributions are applicable to rural youth who drop out of high school.

3. What other themes emerge as impacting the educational trajectory, specifically the decision to drop out of high school, of rural SC youth who dropped out of high school and enrolled in adult education?

Rationale: Although the qualitative stage will be guided by attribution theory, other themes may emerge and should be considered.

4. Which themes from the qualitative portion align with variables contained within the ELS:2002?

Rationale: Preliminary research indicated attribution theory may be applicable to rural youth who drop out of high school. The ELS:2002 baseline student questionnaire was reviewed for constructs potentially relevant to attribution theory (Table 3.1). Additionally, themes beyond the initial coding framework will be considered.

5. Using the themes obtained through the qualitative portion of the study with a national sample (ELS:2002 data), how do rural students who graduated from high school differ from those who dropped out of high school?

Rationale: Determining if and how rural graduates differ from rural dropouts is vital in pinpointing the potentially targetable factors for reducing rural dropout, and the use of a national dataset allows for this exploration on a larger scale.

6. Do the themes obtained through the qualitative portion differ for the full sample of the ELS:2002 data and across geographic locale (i.e., urban/suburban/rural) in predicting high school dropout?

Rationale: Previous research suggests disparities between rural and non-rural schools and students in the state of SC (Showalter et al., 2019). Exploring the national data for differences across geographic locale may provide insight into how to best approach the problem of high school dropout.

7. Are there targetable factors that could be the focus of future research to reduce the likelihood of dropping out of high school for rural youth?

Rationale: To impact future educational policy and research, it is important to identify the targetable factors which most significantly affect the odds of graduating or dropping out of high school.

3.3 Stage 1: Qualitative Study of Attributions

The general goal of qualitative analysis is to identify topics, themes, and patterns, and then to draw inferences about their meaning. A qualitative approach allows the voices of the students themselves to be heard. Identifying the factors deemed most important from the perspective of the students can help direct educational policy in developing dropout prevention efforts specifically targeting rural communities. Therefore, focus groups were conducted to encourage discussion of perceptions of attributions and other factors related to high school dropout. Fugard and Potts (2015) propose a quantitative approach to informing sample size selection for qualitative analysis. Their approach suggests a sample size of 10 would have approximately 80% power to detect three instances of a theme assuming 40% population theme prevalence.

Focus Groups

Focus groups involve “organized discussion with a selected group of individuals to gain information about their views and experiences of a topic” (Gibbs, 1997, abstract, bullet 1). A primary reason to use this methodology is to “draw upon respondents’ attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods” (Gibbs, 1997, para. 2). Among the strengths of this approach are its ability to obtain several perspectives about the same topic, how it allows

the researchers to gain understandings of everyday life, and its efficiency in gathering information in a relatively short period of time. On the negative side, it can be difficult to identify individuals as opposed to the group view, heightening the importance of the role of the facilitator. In particular, facilitators must articulate clear expectations, help participants feel at ease, moderate interactions among group members, and steer the conversation back on course while ensuring all participants get a chance to speak.

Data Collection

Despite SC being largely rural, finding a rural adult education program at which to conduct the focus groups proved challenging. Locations were originally identified through Common Core Data locale codes developed by the NCES (NCES, 1999), which are based on United States Census data regarding population density. These codes identify specific public schools as being rural. Throughout the course of two years, I corresponded with five different adult education directors across the state by email, telephone, and in-person. Initial responses were positive; however, little to no response was received for numerous follow-up attempts. One director implied her program would not likely have the 10 students needed for the focus groups. This setback required a new approach. Rather than using NCES locale codes for individual schools, I broadened the selection to the full county. With this new definition, I was able to find an adult education program located in a rural county. The adult education program's facility was located within a territory labeled as Town-Fringe by NCES; however, the students attending the program lived throughout the rural county. Furthermore, the adult education program provided services for students from two separate high schools. One was located in the

same territory as the adult education program, and the other was in a territory labeled as Rural-Distant.

Identifying 10 participants meeting the criteria for the focus groups was another obstacle. Many students fell below the age cutoff of 18, leading to the need for adding students at age 17. The timing of the focus groups coincided with a large number of students having recently completed their work at the adult education program, making it difficult to encourage them to return for a focus group. For this reason, the focus groups were conducted with nine participants rather than the proposed 10. According to Fugard and Potts (2015), nine is an acceptable number of participants with approximately 80% power to detect three instances of a theme assuming 50% population prevalence.

Participants

Potential participants were identified at an adult education program in a rural SC county. The selected county was designated as rural through Common Core Data county and town codes developed by the NCES (NCES, 1999). To be eligible for the study, participants must have left high school within the five years preceding the study and be between the ages of 17-24 at the time of the study. This ensured the recency of the information. After receiving Institutional Review Board approval, participant consent was obtained. Participants were offered \$20 in remuneration to cover mileage and compensate them for their time.

Procedures

Focus groups were arranged at the adult education program facility at a time convenient for the participants. Each focus group followed a semi-structured format and took approximately one hour each. All sessions were audio and video recorded. Two

individuals facilitated each focus group – a primary facilitator (Reed) led participants through a series of questions and managed, encouraged, and monitored group participation; a second facilitator took detailed notes as a backup recording method. Recordings of the focus group were sent to a professional transcription service with expertise in focus group transcription. The transcripts were returned to the primary facilitator to check accuracy and completeness. Errors were noted and corrected and other relevant nonverbal communication (e.g., crying, laughter, long pauses) was inserted into the text where appropriate. Once “cleaned,” the transcripts were entered into NVivo 10, a qualitative software program designed to facilitate the processing and analysis of unstructured data.

Measures

The core of the focus groups consisted of questions designed to elicit perceptions of attributions for high school dropout and other academic successes and failures. Additionally, participants were prompted to discuss their perceptions of factors related to high school dropout in the surrounding rural community. A copy of the focus group questions is included in Appendix A.

Qualitative Data Analysis

Qualitative data were analyzed using a directed content analysis approach (Hsieh & Shannon, 2005) with a constant comparison technique (Boeije, 2002; Glaser, 1965) involving the following procedures: noting similarities/dissimilarities in the data; searching for themes and patterns; drawing inferences about patterns; and confirming and disconfirming findings. NVivo 10 was used to code the transcripts, thus reducing and organizing the data for qualitative analysis. Coding involves the development of a

collection of references about a specific theme. An initial coding framework guided identification of attributions for high school dropout based on attribution theory. As analysis proceeded, additional codes were developed, and the initial coding scheme was revised and refined. A coding book was developed in NVivo 10 to ensure detailed documentation of procedures, decisions, and rationale for decisions, which supports consistency, dependability, and duplicability of the results.

3.4 Stage 2: Quantitative Study

Data was used from the ELS:2002, which was initiated in the spring of 2002 using a nationally representative, longitudinal design to explore the transition from high school to postsecondary school and/or work. A two-stage sampling design was implemented in which researchers selected eligible public and private schools based on a stratified, probability proportional to size sampling approach. Of the 1221 eligible schools from across the US, 752 agreed to participate. In the second stage, a stratified, systematic sampling approach was used to identify approximately 26 tenth-grade students from each participating school. Of the nearly 20,000 students approached to participate in the 2002 baseline study, 15,360 participated (NCES, 2018). Two distinctive features exist within the ELS:2002. First, it is a longitudinal study with baseline data collected in 2002 and follow-ups completed in 2004, 2006, and 2012. Second, the ELS:2002 is an integrated multilevel study with multiple respondent populations, including students, parents, teacher, and schools.

Participants and Procedures

Participants were identified from the ELS:2002 data based on high school dropout or graduate status confirmed during the second follow-up (2006). A variable exists within

the 2006 follow-up data that identifies students as having no available evidence of a dropout episode or evidence of dropout episode (F2EVERDO). Evidence of dropout episode included student- and school-reported dropouts from the first follow-up (F1), student-reported dropout or GED completion from the second follow-up (F2), and student transcripts indicating dropout, GED completion, dismissal, or incarceration at F2. For students identified as having available evidence of a dropout episode, the 2006 follow-up variable on high school completion (F2HSSTAT) was used to identify students who completed or did not complete high school as of 2006. Options within the F2HSSTAT variable include: 1) Fall 2003-Summer 2004 graduate, 2) Post-summer 2004 graduate, 3) Pre-fall 2003 graduate, 4) Graduate, date unknown, 5) Certificate of attendance, 6) GED or other equivalency, 7) Still enrolled in high school, 8) No high school credential, working towards GED or other equivalency, 9) No high school credential, not working towards GED or other equivalence, and 10) Status cannot be determined. Students identified within the first four categories of the F2HSSTAT variable were coded as GRAD for the current analysis. Students identified as having a GED or equivalent and those who received no high school credential, regardless of whether working towards GED or equivalent, were coded as DROPOUT for the current analysis. Students who were still enrolled in high school, who received a certificate of attendance, or whose status could not be determined were excluded. Next, the variable of school urbanicity at baseline (BYURBAN) was used to identify if students attended a school in an urban, suburban, or rural locale. Identification of school urbanicity was based on the Common Core of Data from NCES (NCES, 2000) and defined as:

- Urban: the school is in a large or mid-sizes central city;

- Suburban: the school is in a large or small town or is on the urban fringe of a large or midsize city; and
- Rural: the school is in a rural area, either inside or outside a metropolitan statistical area (NCES, 2000, p. 40).

Limiting the participant sample to only those with data for the items selected for analysis (outlined below), the sample for the current study was reduced to 8638. Participant characteristics are reported below.

Measures

Items for analysis came from the ELS:2002 baseline data. Item selections from the ELS:2002 baseline data were dependent on the results of the qualitative stage. The baseline student questionnaire from ELS:2002 includes seven sections which focus on “(1) locating information, (2) school experiences and activities, (3) plans for the future, (4) non-English language use, (5) money and work, (6) family, and (7) beliefs and opinions about self” (NCES, 2004, pp. 16-17). Table 3.1 outlines constructs that were considered as potentially relevant to the current analysis.

Table 3.1

Potentially Relevant ELS:2002 Baseline Variables

Variable	Description	Connection to Attribution Theory
Locating Information		
Demographics	Sex, race/ethnicity, SES	May provide insight on gender, racial, or socioeconomic differences in theory application
School Experiences & Activities		

School climate	School environment, peer relationships, student-teacher relationships, safety	Social attributions
School disengagement behaviors	Skipping school, tardiness, discipline problems	Internal, controllable, effort
Friends at school	Importance friend places on good grades	Social attributions
Attitudes toward school	Reasons for attending school (personal challenge or satisfaction, teacher expectations, parent expectations)	Internal vs external
Student engagement (specific to math and English)	Examples: Review work from previous day Copy teacher's notes Participate in discussion Time spent on homework Preparedness	Internal, controllable, effort
Plans for the Future		
Student educational expectations	Expect less than high school, high school, 2yr degree, some college, 4yr degree, graduate degree	Internal, uncontrollable, ability
Plan for education	Plan to continue education after high school, plan to attend 2yr, 4yr, or vocational school	Internal, controllable, effort
Perceived parental educational expectations	Expect less than high school, high school, 2yr degree, some college, 4yr degree, graduate degree	Social attributions
Perceived expectations of other for plans after high school	Expect college, work, military, marriage	Social attributions
Family		
Parent involvement in academics	Check homework, help with homework, limit privileges due to grades, discuss school activities, prepare for college	Social attributions
Parent involvement in household activities	Limit TV and video games, limit time with friends, require chores	Social attributions
Beliefs & Opinions about Self		
Math ability (Implicit theory of learning)	Agree or disagree most people can learn to be good at math	Internal, uncontrollable, ability

Perceived competence in academics (Self-efficacy)	or you have to be born with ability to be good at math Example: Degree of agreement on “When I sit myself down to learn something really hard, I can learn it.”	Internal, controllable, ability Internal, uncontrollable, ability Internal, controllable, ability
Effort in school (Effort and persistence)	Examples: Degree of agreement on “When studying, I try to work as hard as possible.” “When studying, I keep working even if the material is difficult.”	Internal, controllable, effort Internal, uncontrollable, ability External, stable, task difficulty

Variable Selection

Variables were selected for the quantitative analysis based on the themes from the qualitative analysis. The ELS:2002 data includes both composite and questionnaire variables. Composite variables were created by combining data from multiple variables based on some construct. Questionnaire variables reflect a single item as written in the survey. Composite variables should be used instead of raw data, as all baseline composite variables have been imputed. Therefore, when available, pre-existing scales within the ELS:2002 were used. Demographic information, including sex, race/ethnicity, and SES were explored for potential differences between those who graduated and those who dropped out. See Appendix B for a full description of the ELS:2002 baseline student questionnaire taken from the ELS:2002 Base Year Data File User’s Manual.

Demographics

The following demographic variables were included in the quantitative analysis: sex, race/ethnicity, and SES. From the ELS:2002 data, the variable F1SEX was used to identify sex. The composite variable for student race/ethnicity (BYRACE) was used to identify race/ethnicity. Socioeconomic status was measured by the BYSES1QU

composite variable constructed from five equally weighted, standardized components: father's education (FATHED), mother's education (MOTHED), family income (INCOME), father's occupation (OCCUFATH), and mother's occupation (OCCUMOTH). This variable was set to equal the quartile breakpoints of the SES1 variable, with the highest quartile indicating the highest SES level.

Variables for Internal Focus Category

For the theme of ability/self-efficacy, two composite variables were identified. The mathematics self-efficacy scale (BYMATHSE) measured the participant's self-efficacy in math at baseline in 2002 with items such as "I'm confident that I can do an excellent job on my math tests." Similarly, the English self-efficacy scale (BYENGLSE) evaluated self-efficacy in English at baseline with items such as "I'm certain I can understand the most difficult material presented in English texts." Higher values on these scales indicate greater self-efficacy. Effort was measured by two composite variables, the class preparation scale (BYSTPREP) and the action control: general effort and persistence scale (BYACTCTL). The class preparation scale includes items on how often the student goes to class with pencil/paper, without book, and without homework done. Action control: general effort and persistence includes: remembers most important things when studies, works as hard as possible when studies, keeps studying even if material is difficult, does best to learn what studies, and puts forth best effort when studying. Higher values on these scales indicate greater effort. Plans for the future were reflected in a questionnaire variable on plans to continue education after high school, dichotomized as yes/no. No variables were identified closely aligning with the other priorities theme. Cronbach's alphas (α) for all composite variables are reported in Table 3.2.

Variables for External Focus Category

A scale was developed for parental involvement including items on how often parents did the following: checks homework, helps with homework, gives special privileges for good grades, and limits privileges for bad grades. Higher values on this scale indicate a higher level of parental involvement. For the theme of teachers, a composite variable (BYTEAQUA) on student perceptions of teacher-student relationships in the school was used. The items in the composite variable included: students get along well with teachers, teaching is good, teachers are interested in students, teachers praise effort, and students feel put down by teachers in class. A composite variable on school safety was considered for the theme of school environment but did not align with the qualitative narrative on school environment. Cronbach's alphas (α) for all composite variables are reported in Table 3.2.

Table 3.2

Cronbach's Alphas for Composite Variables

Variables	α
Internal Focus	
Math self-efficacy (BYMATHSE)	0.93
English self-efficacy (BYENGLSE)	0.93
Class preparation (BYSTPREP)	0.81
Action control: general effort and persistence scale (BYACTCTL)	0.89
External Focus	
Teacher-student relationships (BYTEAQUA)	0.69

Analysis

Public-use ELS:2002 baseline and 2006 follow-up data were used. Descriptive statistics were obtained. Attributions and other factors, as identified during the qualitative stage, were compared between those who graduated and those who dropped out of high

school using frequency and cross-tabulation tables. Pearson correlation coefficients were computed to assess the linear relationships between the composite variables.

ELS:2002 used a stratified, two-stage random sampling design with the primary sampling unit being the selection of the school, and the second stage was random selection of students from those schools. This hierarchical approach to sampling results in a clustered sample, which can lead to an increase in the standard error. Due to this complex design of sample selection, certain procedures were required to account for the effects of clustering and to avoid issues with significance testing, such as Type 1 errors. One such procedure includes the use of panel weights. The weighting scheme compensates “for unequal probabilities of selection of schools and students into the base year sample and to adjust for the fact that not all schools and students selected into the sample actually participated” (NCES, 2004, p. 36). For the current analysis, the F2BYWT variable was enabled because this weight most closely matches the rounds of data collection (2002, 2006) associated with the independent and dependent variables in this analysis. To account for non-independence of observations, sample stratification, and selection bias, Mplus version 8.5 (Muthén & Muthén, 2010) was used to analyze the data with a robust maximum likelihood estimator using TYPE = COMPLEX, which serves to adjust the standard errors in the model for non-normality and accounts for the aforementioned clustering effects. Missing data were handled with full information maximum likelihood estimation.

Logistic regression is used to “model the chance of an outcome based on individual characteristics” (Sperandei, 2014, p. 14). In the current analysis, the outcome was graduation from high school (GRAD, DROPOUT). Because graduation from high

school is a dichotomous variable, binary logistic regression was used to examine the odds of graduating from high school based on the attributions and predictors identified in the qualitative stage, as well as demographic variables including sex, race/ethnicity, and SES. In logistic regression, odds are the ratio between “the probability of an event favorable to an outcome and the probability of an event against the same outcome” (Sperandei, 2014, p. 14). First, analyses were conducted for the full sample. Then multigroup analysis was utilized to test whether associations were moderated by school urbanicity (urban/suburban/rural). Wald tests were used to compare the logistic regression slopes between urban, suburban, and rural students. To address the three pairwise comparisons, the Bonferroni-adjusted p-value of $.05/3 = .0167$ was used. Odds ratios (OR) and 95% confidence intervals (CI) are reported.

CHAPTER 4

RESULTS

This chapter outlines the results of the study by first detailing the participant sample in the qualitative stage and the themes resulting from the qualitative stage. Next, participant selection and characteristics are provided for the quantitative stage, followed by a summary of the variables selected for quantitative analysis, and the results of that analysis.

4.1 Qualitative Analysis

Qualitative Participant Characteristics

Participants ($n = 9$) were predominately white (77.8%) and female (77.8%), which is representative of the students at the adult education program facility. The majority of participants were 18 years of age, with two who were 17 and one who was 20. All participants resided in a county identified as mostly rural by the Common Core of Data from NCES (NCES, 2000). Four participants had left a high school located in a Rural-Distant territory, and five formerly attended a high school in Town-Fringe territory.

Themes

The qualitative analysis resulted in the following seven themes across the two categories of Internal Focus and External Focus. Themes with an Internal Focus included: (a) ability/self-efficacy, (b) effort, (c) plans for the future, and (d) other priorities.

Themes within the External Focus category included: (e) parents and home life, (f) school environment and administration, and (g) teachers. What follows is a distillation of the

narrative supporting each theme. Participant names have been changed to protect confidentiality.

Internal Focus: Ability/Self-efficacy

Feelings of inadequacy were described by several participants in statements as simple as, “Yeah, I’m terrible at math.” (Kristen, female, 17) to more in-depth feelings of failure, such as below.

Rachel (female, 18): I never learned all the material and never felt comfortable with it. It was only if I had teacher assistance. And I was failing. I've always been failing math. I failed geometry my 10th grade year. But I would tell him I'm trying, I'm trying. I'd get so frustrated, I'd cry, because I really was trying. I just can't do math.

Sam (male, 18) shared how he felt like a lost cause when he stated, “At first, before I came here, I felt dumb. I felt like because I felt, you know, nobody wanted to help me, I was a lost cause.”

Internal Focus: Effort

Many participants saw lack of effort as a common reason for failing or leaving school, as illustrated in this exchange between Beth (female, 18) and Kristen.

Beth: Everybody's got their own reasons and you've got people like us that just didn't like it anymore. You got ones that quit trying all together.

Kristen: We've seen a lot of those after we left. They tried to make it over here [adult education], and couldn't even do it over here.

Rachel referred to her own effort in being successful on tests, “But, unless I studied really hard and I put myself to the test, that's when I did good on a test. Just learning the materials, and knowing it in class, and then taking tests.” Tonya (female, 20) recognized that lack of effort led to bad grades for herself.

Tonya: If I got a bad grade, I always wanted to pull it up. I don't like bad grades. If I seen something bad, I'm like, oh no, we gotta change that now.

Facilitator: Yeah, what do you think would have led to any of those bad grades? Like, when you thought about, why did I get this bad grade-

Tonya: Just me flying through it, not even, you know, wanting to do it properly, just...

Facilitator: So the effort was just, emm?

Tonya: Yeah.

She went on to imply other students are also missing out due to lack of effort as noted in this exchange.

Janelle (female, 17): It's kind of one of those things like if all the kids know it but then you're struggling, it's like, let me sit here, I'll make it by.

Sam: Exactly. So the teacher never really knows if you're struggling or just not doing it.

Tonya: But if you asks questions then, then the teacher will have known. Don't nobody raise their hands in class no more.

Finally, when asked what changes could be made by kids having a hard time in school, Tonya responded, “Get engaged.”

Internal Focus: Plans for the Future

Plans for the future were part of what was driving several participants. They attributed their current success in adult education to those ambitions, particularly the desire to go to college. Lyndsey (female, 18) expressed, “I wanted to go to college so I got back into school.” Similarly, Janelle shared, “I really wanna go to college. That's been my whole plan, this whole time. Being at the high school, I lost my way, so it just led me here [adult education].” For some, plans for the future were related to providing a better life for their family or being an example for younger siblings. As Tonya stated, “I always wanted to graduate and go to college and do stuff for my son that wasn't did for me, so.” Sam echoed that outlook.

Sam: I was just like, I'm not doing nothing with my life, you know. Not doing nothing at all. I was becoming what everybody claimed I was gonna be. So, I said, you know, I'm gonna do this for my brother and my sister. Not only for my grandmother and myself, I'm doing it so that they can see they can go a different way. You know what I mean.

Internal Focus: Other Priorities

Several participants indicated other priorities led to students not engaging and even leaving high school. When asked what they thought was the number one, most important, reason students were leaving high school in their community, one participant pointedly responded, “Drugs.” Other participants supported and added onto that sentiment.

Beth: That is a part.

Philip: That's a big part of [CITY NAME REMOVED].

Beth: It really is. A lot of them, they're wanting to be drug dealers.

Kristen: Yeah, and little young rappers.

Facilitator: They think they're going to make money that way, is that what you mean?

Kristen: Yeah.

Beth: Yeah.

Personal use of drugs and alcohol was also mentioned as a deterrent for participating in school. As Sam indicated, “I don't wanna, because I was, I was slipping up, smoking weed, and drinking. All the time. It wasn't nothing funny about it, you know, it was every day, that I felt dependent on that.” Responsibilities outside of school also took priority, as Tonya shared, “I had a child at an early age and I dropped out my twelfth grade year.”

External Focus: Parents and Home Life

The influence of parents and home life on school was apparent. Participants often saw parents as failing their children, as noted by Kristen, “It's not just the teachers that's failing the students. The parents are also failing the students. Yeah, kids get in trouble at school. But if you're at home they're supposed to teach you discipline, manners.”

Rachel shared how lack of support from a parent led to feelings of depression.

Rachel: I lived with my mom until right after I turned 18. I moved in with my dad, but he never had me full time so it was a big change for both of us. But he's always been in my life. He's my A1 day 1. She was the worst support system. She is Satan. I mean, it's like home problems, school problems. I was the most depressed youngin' you had ever seen. So, no, I did not have that one on one support. If I needed help, she wouldn't even bother to look at me.

Sam described his experience with a parent who was not involved due to drug use and how it impacted his view of his own life.

Sam: My momma, had started, for years my mom's always been on drugs... and we had just started, I live with my grandmother, my brother and my sister - and my mom just recently got back on Xanaxes, and I, it made me think, I woke up and I was like, you know, I don't want to live that life.

He added that parents should be more cognizant of how their behaviors can be passed on to their children.

Sam: When kids see that, kids are gonna grow up to be like their parents. We're small minded, we look forward to something to follow. When we're seeing moms and dads go out and smoking weed and drinking and doing drugs, and that's all we know, what do you think's gonna happen?

Philip reiterated that stance.

Philip: If my parents hadn't have raised me the way they did, I wouldn't be where I'm at today. And parenting plays the biggest role in a kid's life or anybody's life as far as that goes. Because the examples they set for you at home and how you're supposed to live, and the way they go about situations is lacked. And people don't understand how to handle situations. And they don't have that discipline at home. And they don't have the people telling them, "Hey, look. You can do this. You just need to take the time and get help."

External Focus: School Environment and Administration

School climate and a focus on making the school look good, rather than focusing on student learning, were frequently mentioned. Rachel discussed how her former high school seemed to care more about its label than the students, “They care more about [CITY NAME REMOVED] High School's label than their students. I just wish that they were a committed and dedicated school to their students. It's about the school, not about the kids.” Beth, Kristen, and Rachel described how the school reacted during visits from school district administrators.

Beth: Especially if the district comes down there. They pretend like-

Rachel: They put on a show.

Kristen: They put on a big show.

Beth: ... y'all ain't good. Y'all do this until they leave.

Rachel: We have to put on a show or we get in trouble after the district leaves.

Philip proposed it was not just an issue in his former high school but statewide as well.

Philip: The bad thing is, is [CITY NAME REMOVED] or South Carolina school systems are so much further behind than North Carolina school systems. But that's because South Carolina has been lacking all of these things all the way up until now. And the school systems is about the academics. They just want the good grades because they get benefits from them.

When asked what changes could be implemented to improve the school environment, Rachel suggested, “They need to address, just about any situation given, they need to address it differently. Everything's just terrible. The school, just the way things are run, it's what makes the environment terrible.”

External Focus: Teachers

Above all, teachers were attributed with much of the responsibility for success or failure in school. Most participants felt the teachers in their high schools did not care

about the students and, in some cases, were even vindictive. Rachel described such an experience:

Rachel: Like one teacher, she told our whole class. She said, because the whole class failed a test and we kept telling her, we all failed. Mind you this. We kept telling her, we don't get it, we don't get it. She said, "I gave it to you 100 times, if you don't understand it oh well." She said, "I'll be the anchor to sink all of y'all's ships." In front of everybody.

Several participants discussed how they felt teachers were not behaving as adults.

Philip: And as an adult, they tell you you're not supposed to bully people, you're not supposed to pick on people. But if you're telling people not to do that, you're supposed to be setting an example as an adult, right? They set no kind of example over there as to how you should act and how you should handle situations. Because they're just as bad as the students are as far as being childish. And the lack of being able to communicate with somebody like an adult. They lack that over there. It's like they forgot to grow up their selves. They missed the whole stage of growing up, becoming an adult. But they're an adult.

Kristen: Yeah. Like you know how teenagers like fuss and fight, they get smart with each other? They will sit there and do that right back to you.

Beth: I know. Like aren't you an adult? Like even if you're not trying to argue back with them, you've got them new teachers fresh out of college 21 and 22. And they'll argue back with you like they 17 too. And it's ridiculous.

The clash between students and teachers was partially ascribed to the small community.

As Beth indicated, "They already know you. It's like the teachers, they already know you.

And if you don't suit them, if they're not feeling you personally, then you're not a party.

Philip cited that very attitude as his reason for leaving high school.

Philip: And the reason I left is because [SCHOOL NAME REMOVED] games. Their fun and games. They're not about your education at all. They have their favorites. If your parents aren't putting in money towards their football team, and their baseball team, or their basketball team, or you don't play sports, they don't care about you. I mean it is what it is. Either you pass or you fail. It's up to you. They give you no extra help.

Conversely, teachers were also viewed as contributing to success. Kristen attributed success to a teacher's ability to understand her needs.

Kristen: I've always been terrible at tests, because I have test anxiety. The only time I ever did good on a test was in English because my teacher, she understood me. It's like one of the only teachers I ever liked throughout my life. She let me listen to music, so I could pass. She knew that would help me and calm me down. Yeah, that's about the only time I ever did good on a test.

Rachel recalled a particular teacher who truly went out of his way to help her.

Rachel: And he would sit down with me. And before he left, he said, "I know you're failing." He said, "Here's make up work and stuff you've been missing." He said, "If you can get all this to me, if it's wrong we'll go back over it, and I'll make sure you understand it. And we'll get your grade up before the end of the year. And I put my mind to it, and he helped me. And I got good grades on all of my tests and everything. It's really the helping matter, because teachers are supposed to be there to help you. And there are not many in [CITY NAME REMOVED].

She went on to describe how the teachers at adult education are similar to that particular teacher in comparison to teachers at her former high school.

Rachel: Yeah they're interested in our personal. If you don't want to tell them, that's fine. They're not asking trying to get in your business, but if you need them, they're there. That's definitely. And at [SCHOOL NAME REMOVED], it seems like every time you try to talk to a teacher or a guidance councilor, they always made it worse. They made the situation awful. I mean, I've had situations with teachers where I got sent home from having panic attacks. It was that bad.

How the participants viewed teachers was perhaps summed up best by Sam:

Sam: Teachers, that's their job, to save kids that can't fix their self, you know. Just like I was saying, when you're growing up with a bad family, you're supposed to find that success. Teachers are supposed to show you that you can be successful.

4.2 Quantitative Analysis

Participant Characteristics

The participants in the full sample were almost equally male (50.7%) and female (49.3%). Participants were predominantly White, non-Hispanic (54.7%), followed by Black, non-Hispanic, (12.2%), Asian/Hawaiian/Pacific Islander, non-Hispanic (8.9%), American Indian/Alaska Native, non-Hispanic (0.8%), more than one race, non-Hispanic (4.5%). Persons of Hispanic origin made up 13.3% of the sample. For this analysis,

persons who were Asian/Hawaiian/Pacific Islander, American Indian/Alaska Native, and more than one race were collapsed into one category, “Other, non-Hispanic.”

Socioeconomic status was broken down into four quartiles, with 21.5% in the lowest quartile, 22.1% in the second quartile, 23.3% in the third quartile, and 27.4% in the highest quartile.

Table 4.1 summarizes participant characteristics for the full sample broken down by the DROPOUT and GRAD categories. There was a significant association between sex, race/ethnicity, and SES and whether a student had dropped out or graduated. Males were more likely than females to be in the DROPOUT category ($X^2(1) = 20.4, p < .001$). Persons in minority groups were more likely to be in the DROPOUT category than persons who were White ($X^2(4) = 163.7, p < .001$), and SES was similarly associated with those in the lowest quartile being more likely to also be in the DROPOUT category ($X^2(5) = 463.7, p < .001$).

Table 4.1

Participant Characteristics by DROPOUT/GRAD Status

Variables	DROPOUT	GRAD
	Row %	
Sex		
Male	9.0	91.0
Female	7.0	93.0
Race/Ethnicity		
White, non-Hispanic	5.9	94.1
Black, non-Hispanic	11.8	88.2
Other, non-Hispanic	6.9	93.1
Hispanic	12.5	87.5
Socioeconomic Status		
Lowest Quartile	15.6	84.4
Second Quartile	8.7	91.3
Third Quartile	5.4	94.6
Highest Quartile	2.8	97.2

Table 4.2 summarizes participant characteristics for each locale by urbanicity (urban, suburban, and rural) broken down by the DROPOUT and GRAD categories. For all levels of urbanicity, there was a significant association between sex, race/ethnicity, and SES and whether a student had dropped out or graduated. For urban locales, males were more likely than females to be in the DROPOUT category ($X^2(1) = 11.0, p < .01$). Persons in minority groups were more likely to be in the DROPOUT category than persons who were White ($X^2(4) = 108.0, p < .001$), and those in the lowest quartile of SES were more likely to be in the DROPOUT category ($X^2(5) = 186.2, p < .001$). The results were similar for suburban and rural locales, respectively. Males were more likely to be in the DROPOUT category than females ($X^2(1) = 6.08, p < .05$; $X^2(1) = 4.0, p < .05$). Minorities were more likely to be in the DROPOUT group ($X^2(4) = 67.1, p < .001$; $X^2(4) = 11.53, p < .05$), and lower SES was associated with a greater likelihood of being in the DROPOUT category ($X^2(5) = 222.0, p < .001$; $X^2(5) = 58.7, p < .001$).

Table 4.2

Participant Characteristics by Urbanicity and DROPOUT/GRAD Status

Variables	DROPOUT	GRAD
	Urban (n = 2378)	
	Row %	
Sex		
Male	9.6	90.4
Female	7.1	92.9
Race/Ethnicity		
White, non-Hispanic	4.5	95.5
Black, non-Hispanic	12.5	87.5
Other, non-Hispanic	5.6	94.4
Hispanic	12.9	87.1
Socioeconomic Status		
Lowest Quartile	16.3	83.7
Second Quartile	8.8	91.2
Third Quartile	5.2	94.8
Highest Quartile	2.8	97.2

Suburban (n = 4541)		
	Row %	
Sex		
Male	8.2	91.8
Female	6.7	93.3
Race/Ethnicity		
White, non-Hispanic	5.7	94.3
Black, non-Hispanic	10.7	89.3
Other, non-Hispanic	7.0	93.0
Hispanic	12.5	87.5
Socioeconomic Status		
Lowest Quartile	15.2	84.8
Second Quartile	8.8	91.2
Third Quartile	4.9	95.1
Highest Quartile	2.7	97.3
Rural (n = 1719)		
	Row %	
Sex		
Male	10.0	90.0
Female	7.8	92.2
Race/Ethnicity		
White, non-Hispanic	7.9	92.1
Black, non-Hispanic	13.1	86.9
Other, non-Hispanic	10.8	89.2
Hispanic	10.3	89.7
Socioeconomic Status		
Lowest Quartile	15.2	84.8
Second Quartile	8.4	91.6
Third Quartile	6.9	93.1
Highest Quartile	3.5	96.5

Bivariate Correlations

Table 4.3 provides a correlation matrix for the composite variables. The results indicated all of the composite variables were significantly and positively related. The highest correlation was between English self-efficacy and the action control composite ($r = .60, p \leq .01$), indicating students who have higher confidence in their English ability also have a higher level of general effort and persistence when studying. Action control was also highly correlated with the math self-efficacy scale ($r = .52, p \leq .01$), again

indicating those who have higher confidence in math ability are more likely to put in more effort and be persistent when studying.

Table 4.3

Correlation Matrix for Composite Variables

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Math self-efficacy	9,982	0.04	1.00	-				
2. English self-efficacy	10,199	0.01	0.99	.37**				
3. Class preparation	13,493	0.04	0.99	.08**	.13**			
4. Action control	9,919	0.05	0.99	.52**	.60**	.19**		
5. Teacher-student relationships	13,252	0.08	1.00	.21**	.19**	.14**	.27**	-

** $p \leq .01$.

Logistic Regression for the Full Sample

Table 4.4 summarizes the results of the logistic regression for the full sample for the likelihood of graduating high school. All demographic variables were significant. Compared to males, females had higher odds of graduating high school in the full sample (OR = 0.644, 95% CI [0.52, 0.80]). White, non-Hispanic students had higher odds of high school graduation than did Black, non-Hispanic students (OR = 0.637, 95% CI [0.45-0.90]) and Other, non-Hispanic students (OR = 0.635, 95% CI [0.45-0.89]) but not Hispanic students (OR = 0.778, 95% CI [0.55-1.10]). The odds of graduating high school were two times greater for each increase in the SES quartile (OR = 2.149, 95% CI [1.82-2.54]). Within the Internal Focus category, significant variables included math self-efficacy, class preparation, and plans to continue education. The odds for high school graduation increased as math self-efficacy and class preparation increased (OR = 1.268,

95% CI [1.10-1.47]; OR = 1.204, 95% CI [1.09-1.33], respectively). Students who had plans to continue education beyond high school had higher odds of graduating high school rather than dropping out (OR = 2.004, 95% CI [1.19-3.37]). Finally, both variables within the External Focus category were significant. Students who perceived better teacher-student relationships had greater odds of high school graduation (OR = 1.175, 95% CI [1.04-1.32]). Similarly, higher levels of parental involvement were related to increased odds for high school graduation (OR = 1.595, 95% CI [1.09-2.34]).

Table 4.4

Logistic Regression for Full Sample for Odds of Graduating High School

Variables	Odds Ratio	SE	95% CI	
Demographic Variables				
Sex				
Male (v. Female)	0.644*	0.071	0.52	0.80
Race/Ethnicity				
Black (v. White, non-Hispanic)	0.637*	0.111	0.45	0.90
Other (v. White, non-Hispanic)	0.635*	0.108	0.45	0.89
Hispanic (v. White, non-Hispanic)	0.778	0.138	0.55	1.10
Socioeconomic Status	2.149*	0.185	1.81	2.54
Internal Focus				
Math self-efficacy	1.268*	0.094	1.10	1.47
English self-efficacy	1.042	0.079	0.90	1.21
Class preparation	1.204*	0.062	1.10	1.33
Action control: general effort and persistence scale	1.071	0.083	0.92	1.25
Plans to continue education				
No (v. Yes)	2.004*	0.533	1.19	3.37
External Focus				
Teacher-student relationships	1.175*	0.071	1.04	1.32
Parental involvement	1.595*	0.31	1.09	2.34

* $p \leq .05$.

Urban/Suburban/Rural Comparison

Tables 4.5, 4.6, and 4.7 summarize the results for the logistic regression by urban/suburban/rural classification for likelihood of graduating high school. For students

residing in urban locales, SES, class preparation, and parental involvement were significantly associated with graduating high school. For each increase in the SES quartile, the odds of graduating high school were two times greater (OR = 2.182, 95% CI [1.64, 2.91]). Students who exhibited higher levels of class preparation had higher odds of graduating (OR = 1.312, 95% CI [1.10, 1.57]), as did students who indicated higher parental involvement (OR = 2.016, 95% CI [1.05, 3.89]).

Table 4.5

Logistic Regression for Urban Sample

Variables	Odds Ratio	SE	95% CI	
Demographic Variables				
Sex				
Male (v. Female)	0.7	0.13	0.49	1.01
Race/Ethnicity				
Black (v. White, non-Hispanic)	0.678	0.195	0.39	1.19
Other (v. White, non-Hispanic)	1.518	0.503	0.79	2.91
Hispanic (v. White, non-Hispanic)	1.038	0.334	0.55	1.95
Socioeconomic Status	2.182*	0.321	1.64	2.91
Internal Focus				
Math self-efficacy	1.271	0.17	0.98	1.65
English self-efficacy	1.107	0.164	0.83	1.50
Class preparation	1.312*	0.118	1.10	1.57
Action control: general effort and persistence scale	0.981	0.152	0.73	1.33
Plans to continue education				
No (v. Yes)	2.523	1.464	0.81	7.87
External Focus				
Teacher-student relationships	1.187	0.118	0.98	1.44
Parental involvement	2.016*	0.677	1.05	3.89

Note. $n = 2378$; $*p \leq .05$.

For students in suburban locales, several variables were related to the odds of graduating high school. Females had higher odds of graduating than males (OR = 0.598, 95% CI [0.43, 0.82]). Within race/ethnicity, being White, non-Hispanic was related to higher odds of graduating as compared to being Other, non-Hispanic (OR = 0.573, 95%

CI [0.36, 0.92]). Significant differences were not seen between White, non-Hispanic students and those who were Black, non-Hispanic or Hispanic. Greater odds of graduating high school were seen for each increase in SES quartile (OR = 2.544, 95% CI [1.98, 3.27]). Similarly, higher math self-efficacy (OR = 1.265, 95% CI [1.03, 1.56]), better perceptions of teacher-student relationships (OR = 1.264, 95% CI [1.06, 1.51]), and greater parental involvement (OR = 1.768, 95% CI [1.14, 2.74]) were related to higher odds of graduating.

Table 4.6

Logistic Regression for Suburban Sample

Variables	Odds Ratio	SE	95% CI	
Demographic Variables				
Sex				
Male (v. Female)	0.598*	0.097	0.43	0.82
Race/Ethnicity				
Black (v. White, non-Hispanic)	0.948	0.282	0.53	1.70
Other (v. White, non-Hispanic)	0.573*	0.139	0.36	0.92
Hispanic (v. White, non-Hispanic)	0.939	0.25	0.56	1.58
Socioeconomic Status	2.544*	0.325	1.98	3.27
Internal Focus				
Math self-efficacy	1.265*	0.133	1.03	1.56
English self-efficacy	1.019	0.114	0.82	1.27
Class preparation	1.144	0.084	0.99	1.32
Action control: general effort and persistence scale	1.059	0.11	0.86	1.30
Plans to continue education				
No (v. Yes)	1.918	0.761	0.88	4.17
External Focus				
Teacher-student relationships	1.264*	0.116	1.06	1.51
Parental involvement	1.768*	0.394	1.14	2.74

Note. $n = 4541$; $*p \leq .05$.

For students in rural locales, only two variables emerged as significantly related to high school completion. Compared to Black, non-Hispanic students (OR = 0.396, 95% CI [0.16, 0.97]) and Other, non-Hispanic students (OR = 0.333, 95% CI [0.17, 0.63]), the

White, non-Hispanic students had greater odds of graduating high school. Similar to urban and suburban students, the odds of graduating high school increased with each increase of the SES quartile, (OR = 1.588, 95% CI [1.11, 2.28]).

Table 4.7

Logistic Regression for Rural Sample

Variables	Odds Ratio	SE	95% CI	
Demographic Variables				
Sex				
Male (v. Female)	0.658	0.175	0.391	1.109
Race/Ethnicity				
Black (v. White, non-Hispanic)	0.396*	0.181	0.161	0.972
Other (v. White, non-Hispanic)	0.333*	0.107	0.177	0.625
Hispanic (v. White, non-Hispanic)	0.421	0.206	0.161	1.098
Socioeconomic Status	1.588*	0.294	1.105	2.283
Internal Focus				
Math self-efficacy	1.303	0.217	0.939	1.807
English self-efficacy	0.998	0.141	0.757	1.315
Class preparation	1.169	0.141	0.922	1.482
Action control: general effort and persistence scale	1.262	0.174	0.963	1.653
Plans to continue education				
No (v. Yes)	1.9	0.819	0.816	4.424
External Focus				
Teacher-student relationships	1.017	0.136	0.782	1.323
Parental involvement	0.727	0.572	0.156	3.394

Note. $n = 1719$; * $p \leq .05$.

Although these results appear to suggest differences across urban, suburban, and rural students in regard to odds of graduating from high school, pairwise comparisons revealed only one significant difference among Other, non-Hispanic students ($\chi^2(1) = 10.80, p = .001$). In urban settings, there was no difference in odds of graduating between White, non-Hispanic students and Other, non-Hispanic students. However, in rural schools, White, non-Hispanic students had greater odds of graduating high school compared to Other, non-Hispanic students. Again, the non-significant tests across locale

codes indicated that the majority of these variables are similarly associated with students' odds of graduating high school.

CHAPTER 5

DISCUSSION

The use of motivation theories to explain high school dropout has been supported by previous research (Alivernini & Lucidi, 2011; Fall & Roberts, 2012; Fan & Wolters, 2014; Hardre & Reeve, 2003; Reeve, 2013). Specifically, the application of attribution theory can help us understand why this phenomenon occurs and how to alleviate it (Reed, 2016). Therefore, the current study sought to examine attributions for high school dropout, as identified by rural students who have dropped out of high school. To do so, a two-stage approach was employed. The first stage involved a qualitative study using focus groups with rural youth in SC who dropped out of high school and entered adult education. The qualitative stage sought to answer the following research questions:

1. What are the primary attributions for academic success and failure, including failure in the traditional high school setting, as defined by rural youth in SC who have dropped out of high school and enrolled in adult education?
2. Do the attributions identified by rural youth in SC, including social attributions, align with attribution theory?
3. What other themes emerge as impacting the educational trajectory, specifically the decision to drop out of high school, of rural SC youth who dropped out of high school and enrolled in adult education?
4. Do any themes from the qualitative portion align with variables contained within the ELS:2002?

The themes identified in the first stage informed the second stage which was a quantitative analysis of a secondary dataset, the ELS:2002. Logistic regression was conducted to answer the following research questions:

5. Using the themes obtained through the qualitative portion of the study with a national sample (ELS:2002 data), how do rural students who graduated from high school differ from those who dropped out of high school?
6. Do the themes obtained through the qualitative portion differ for the full sample of the ELS:2002 data and across geographic locale (i.e., urban/suburban/rural) in predicting high school dropout?
7. Are there targetable factors that could be the focus of future research to reduce the likelihood of dropping out of high school for rural youth?

This chapter discusses the findings for each of these questions, along with practical applications of the results, limitations, and suggestions for future research.

5.1 Qualitative Findings and Interpretation

Findings

The primary attributions for academic success and failure, including failure in the traditional high school setting, as defined by rural youth in SC who dropped out of high school and enrolled in adult education included seven themes across the two categories of Internal Focus and External Focus. Themes with an Internal Focus included: (a) ability/self-efficacy, (b) effort, (c) plans for the future, and (d) other priorities. Themes within the External Focus category included: (e) parents and home life, (f) school environment and administration, and (g) teachers. These themes and categories somewhat align with attribution theory, including social attributions, to explain rural high school

dropout. Specifically, within the Internal Focus category, ability/self-efficacy and effort are aligned with ability and effort, respectively, in attribution theory (Graham & Williams, 2006; Weiner, 2010). The three themes from the External Focus category are aligned with research on the influence of social attributions (Weiner, 2000). Two additional themes were identified that fall outside of the purview of attribution theory: plans for the future and other priorities. Most of the identified themes were in line with variables contained within the ELS:2002 data, although no ELS:2002 variables were identified closely aligning with the other priorities or school environment themes.

Interpretation of External Focus Category

The interpretation of the qualitative study would be best served to begin with the social attribution themes within the External Focus category, as they seemed to have the greatest impact for most of the participants. The influence of parents and home life was particularly apparent, as several participants noted lack of involvement, support, and discipline from their parents, as well as parents who modeled risky behaviors. Given the abundance of previous research indicating parental involvement is related to academic aspirations (Kirk et al., 2011), achievement (Boonk et al., 2018), and persistence (Ross, 2016), it is not surprising that these students left high school. Specific to rural youth, parental involvement in the form of educational expectations is a type of social capital that is a particularly salient predictor of educational aspirations (Byun et al., 2012b).

Relationships with parents may also have played a role in shaping teacher-student relationships, as previous research has found students with less supportive and involved parents have lower quality teacher-student relationships (O'Connor, 2010) and more frequent conflict with teachers (Wyrick & Rudasill, 2009). Such appeared to be the case

in the qualitative stage of the current study, as some high school teachers were viewed as being unsupportive, nosey, or unhelpful and sometimes even actively detrimental. In contrast, the participants viewed the adult education teachers as being glad to help with anything, listening to personal problems, and hyping students up. Several participants shared that teachers in their high school would play “fun and games” and would have favorite students who received all of the support. They attributed this to the size of the school and the surrounding community, as well as the young age/lack of experience of newer teachers. Rural schools have a difficult time recruiting highly qualified teachers and face high turnover (Maranto & Shuls, 2013; Monk, 2007), and the growing teacher shortage has amplified these problems (Oyen & Schweinle, 2021), which raises the question as to whether rural youth have a heightened risk of developing negative teacher-student relationships that, in turn, may negatively impact factors related to potential for high school dropout, such as attitudes toward school, school attendance, and engagement and achievement in academics (McGrath & Van Bergen, 2015). Another consideration is that teachers may not realize their empowering influence on keeping students in school. One study found teachers believe students do not care about their opinions and are too strongly influenced by outside forces (Knesting-Lund, 2013); yet, research with rural youth indicates teachers’ educational expectations are positively related to their students’ educational aspirations (Byun et al., 2012b).

Further results from the External Focus category highlighted the role of the school environment and administration regarding rural high school dropout. The National School Climate Center (National School Climate Center, 2022) recognizes institutional environment as an essential dimension of school climate, and previous research (Thapa et

al., 2013) has demonstrated the importance of school climate for academic achievement and other positive life outcomes for students. Furthermore, school administrators and others in leadership roles within the school have a direct impact on school climate (Pepper & Hamilton, 2002). Yet, similar to issues with teacher retention, rural schools face higher administrator turnover than do urban and suburban schools (Goldring & Taie, 2018).

Besides social attributions, the external locus of attribution theory, including task difficulty and luck, did not emerge from the qualitative data. Given the fact that these particular students were now enrolled in adult education, it could be that they were already taking responsibility for their own actions. Different themes may have emerged with a sample of students who had dropped out of high school and had no plans to return to school in any form.

Other theories of motivation may help to explain the importance of parents and teachers in deterring students from dropping out of school. Self-determination theory suggests students are able to be engaged and persistent when their needs for autonomy, competence, and relatedness are fulfilled (Deci & Ryan, 1985). These needs do not seem to be met for many students who are lacking parental guidance or teacher-student connections.

Interpretation of Internal Focus Category

Regarding the internal locus, participants recognized ability and effort as playing a role in their academic successes and failures. Many participants indicated feelings of inadequacy, with a few saying they felt stupid or dumb while in high school, but this may circle back to the External Focus theme of teachers. Participants pointed out that not

receiving support from high school teachers is what made them feel so inadequate, which does not align with how attribution theory views ability as stable and beyond personal (or other) control (Graham, 2020). Therefore, perhaps the identified theme of ability was never really about ability after all but about the teacher expectancy effect, also called the Pygmalion effect, which states “one person’s expectations of another’s behaviors may come to serve as a self-fulfilling prophecy” (Rosenthal & Jacobson, 1968a, p. 20). This may be a product of the small size of the rural community and school, as teachers enter the classroom with foreknowledge about students that may color how they interact with each student. Whatever the reason, more recent exploration of the effect supports the idea that teacher expectations merit further study as they may impact student outcomes through classroom climate, feedback, the time given to each student, quality of the curriculum, and response opportunities (Murdock-Perriera & Sedlacek, 2018).

In contrast, the theme of effort did align with attribution theory, as it was mostly viewed as within personal control. Participants expressed understanding they were personally responsible for the amount of effort they put in, but they did indicate amount of effort may be influenced by other factors. For example, a student may be embarrassed to ask for help, so, rather than possibly stand out, he/she just stops trying. Embarrassment may be due to shame from teachers, as one participant reported former teachers as being rude and putting bad grades up on the board for everyone to see. Unfortunately, children often feel shamed at school, which can lead to their autonomy being undermined (Goodman & Cook, 2019).

Outside of attribution theory, several participants attributed their current success in adult education to plans for their future, which is interesting because they did not

express having those plans while still in high school. One explanation for this may come from expectancy-value theory, which emphasizes one's expectations for success and the value placed on the goal (Wigfield & Eccles, 2000). A participant expressed that being in high school caused her to lose her way, which implies rather low expectations for success. Within expectancy-value theory, task value is viewed as either attainment value (importance is placed on doing the task well), intrinsic value (task brings enjoyment), cost (time taken away from other activities, effort, emotional cost), and utility value (importance of task for meeting future goals). The latter seems to apply here. It took dropping out of high school for several participants to see the utility value in returning to school and entertain ambitions of moving forward with their education.

Additionally, opportunities for meaningful employment while still attending school had a positive impact on several participants. One even said she was working in her dream job because of a program through adult education, which would not have been possible had she stayed in high school. Again, this could be explained by expectancy-value theory, as participants found utility value in what the adult education program was offering them and reduced cost, in that they had time to pursue activities besides school.

5.2 Quantitative Findings and Interpretation

Bivariate Correlations and Interpretation

In general, the results suggest students who were high in English and math self-efficacy were also high in action control: general effort and persistence. This finding aligns with previous research (Komarraju & Nadler, 2013) indicating high self-efficacy in academics is positively related to having a growth mindset, and, when students believe intelligence is malleable, they are more likely to exhibit self-control and persistence.

Interpretation of Logistic Regression of Full Sample

When examining the full sample from the ELS:2002, differences were seen by sex, race/ethnicity, and SES. Males, minorities, and those with lower SES were more likely to dropout. These findings are not surprising, as previous research with ELS:2002 data found sex and family SES to be significant predictors of high school dropout/completion (Wood et al., 2017). Data on *Trends in High School Dropout and Completion Rates in the United States* from the NCES (Chapman et al., 2010, 2011; Stark & McFarland, 2015) historically have indicated a racial/ethnic disparity in high school dropout rates with Black and Hispanic having higher dropout rates when compared to White students, which aligns with the current study's findings. However, the trend appears to be changing as reports on data as recent as 2013 and later (McFarland et al., 2020; McFarland et al., 2018a; McFarland et al., 2016, 2018b) noted no measurable differences between White, Black, and Hispanic students in event dropout rates. Additionally, research exploring the relationship between race/ethnicity and high school dropout has found that, when accounting for other factors, the likelihood of high school dropout is not significantly different for students from minority races when compared to White students (Wood et al., 2017). So often, single student factors, such as race/ethnicity, sex, and SES are blamed for disparities in academic performance (i.e., the achievement gap) (Bohrnstedt et al., 2015; Cohen et al., 2006; Hanushek et al., 2022; Howard, 2020; Kellow & Jones, 2007), but, in recent years, a new phrase has emerged, the opportunity gap, that refers "to the deficiencies in the foundational components of societies, schools, and communities that produce significant differences in educational – and ultimately socioeconomic – outcomes" (Welner & Carter, 2013, p. 3). This shift in

the data and in research suggests explanations for high school dropout behavior cannot rely only on single student factors, rather the intersection of multiple student, school, and community factors should be considered (Storer et al., 2012) including school discipline and the school-to-prison pipeline, the need to earn income for the family, and teenage birth rates and childcare requirements (Marchbanks et al., 2018; Triplett & Ford, 2019). Perhaps the opportunity gap is the real issue.

The logistic regression of the Internal and External Focus variables with the full sample yielded some results similar to the qualitative themes obtained from the rural participants. Math self-efficacy (ability), class preparation (effort), plans to continue education (plans for the future), teacher-student relationships (teachers), and parental involvement (parents and home life) were all promotive factors for high school dropout/completion in the full sample. Self-efficacy refers to one's perceived competence in successfully performing a task (Pajares, 1996) and is tied to motivation and effort (Komarraju & Nadler, 2013). Therefore, it makes sense that students who feel competent in their math abilities also put forth the effort to prepare for class and persist to complete high school. Research suggests this relationship between self-efficacy and drop out behavior is mediated by educational expectations (Fan & Wolters, 2014), which explains why the current study found plans to continue education as predictive of high school completion. Students who expect to complete a degree beyond high school and are confident in their ability to do so will be motivated to earn their high school diploma.

In addition to the expectations students hold for themselves, the expectations of teachers are an important factor in high school completion. An abundance of literature has shown teacher expectations to be related to academic competence and performance

(Benner et al., 2021; Friedrich et al., 2015; Hinnant et al., 2009; Rosenthal & Jacobson, 1968b), as well as educational attainment (Boser et al., 2014). The expectations teachers hold also correspond to their approach to teaching, as teachers who hold high expectations for all students are more likely to encourage autonomy, provide clear explanations and feedback, and view their students more positively (Rubie-Davies, 2008). Furthermore, teacher expectations are correlated with teacher-student relationships, with high expectations suggesting a level of care and respect that fosters better teacher-student relationships (Rubie-Davies, 2010). Such a correlation is pertinent given research has demonstrated the teacher-student relationship is far-reaching, influencing student attitudes about school, attendance, and ultimately, academic achievement (McGrath & Van Bergen, 2015).

Not surprisingly, parental involvement also emerged as a promotive factor for high school completion in the current study. Parental involvement in education has been linked repeatedly to student engagement at school and academic self-efficacy, motivation, and achievement (Benner et al., 2016; Fan & Williams, 2010; Ross, 2016). Particularly relevant, parental involvement was identified as a significant predictor specifically for high school dropout/completion in a previous study (Ross, 2016).

Interpretation of Urban/Suburban/Rural Comparison

In suburban and rural settings, minority students (compared to White students) were less likely to graduate high school. As previously stated, data (Chapman et al., 2010, 2011; Stark & McFarland, 2015) have historically demonstrated measurable differences in event dropout rates by race/ethnicity, with Black and Hispanic students having higher event dropout rates than White students. Yet, the current study found

race/ethnicity was not predictive of high school completion for the urban sample, which aligns with a recent study of urban students in Louisiana that found race alone does not appear to be significantly predictive of dropout, and other factors should be considered as “root causes” of the dropout issue (Robison et al., 2017, p. 44). In fact, research, as a whole, seems to be pointing toward race/ethnicity as a moderating variable (Storer et al., 2012; Triplett & Ford, 2019; Wood et al., 2017). Again, perhaps the focus should be on the intersection of multiple factors as predictive of high school dropout/completion.

Across all settings, the lower the family SES, the more at-risk students become of not graduating. In particular, it appears SES has a much stronger impact on the likelihood of graduating high school in urban and suburban areas as compared to rural areas. This finding is rather surprising, given the persistent poverty experienced in rural areas (Miller & Weber, 2014). However, it may be due to the increase of people living in poverty in urban and suburban areas since 2000. While poverty rates have also risen in rural areas in the same timeframe (23% change from 2000 to 2016), the increase has not been as dramatic as for urban (31% change) and suburban (51% change) areas (Parker et al., 2018).

Promotive factors, including class preparation, math self-efficacy, parental involvement, and teacher-student relationships, were predictive of high school completion for urban and suburban students but not for rural students. Here is where persistent poverty may enter the equation, given its impact on education levels in rural areas (Miller & Weber, 2014). According to the NCES (2022), “In 2020, the poverty rate for children under age 18 was highest for those in households in which no parent had completed high school” (p. 6). Given the persistent poverty in rural areas, rural students

may be more likely to have parents with lower levels of education, which has been found to be predictive of educational barriers perceived by rural youth in a national sample (Irvin et al., 2012). Parents with lower levels of education are less likely to be involved in their children's education due to lack of confidence in their own academic competence and feelings of inferiority (Hornby & Lafaele, 2011). Therefore, rural youth may view their parents' lack of educational attainment and involvement as evidence of a lack of value in education, which could limit class preparation and feelings of self-efficacy. Persistent poverty may also play a role at the school level, as rural schools are often underfunded (Showalter et al., 2019), resulting in a lack of highly qualified teachers and other resources necessary to create an environment that fosters teacher-student relationships.

In general, pairwise comparisons of the odds of graduating high school were not significant except for "Other" race/ethnicity between the urban and rural samples. In the current study, the "Other" category for race/ethnicity included students who were Asian/Hawaiian/Pacific Islander, American Indian/Alaska Native, and more than one race. A possible explanation for the significant difference between the urban and rural samples is that Native Americans are overrepresented in rural areas and may be impacted the most by the challenges faced by rural students (Logan & Burdick-Will, 2017).

5.3 Implications

The current study has implications for several areas of education, perhaps most importantly as a recommendation for teacher professional development on the power of the teacher-student relationship to promote persistence in high school completion. Previous research has found teachers tend to perceive their role as limited when it comes

to a students' choice to drop out of high school (Knesting-Lund, 2013), yet the qualitative stage of the current study yielded themes focused on the role of teachers and administrators in participants' decisions to drop out of school. Additionally, some students have parents who are uninvolved in their education for a variety of reasons (Baker et al., 2016; Hornby & Lafaele, 2011) or, even worse, are neglectful or abusive. An encouraging relationship with a teacher may provide the support a student needs to be successful in his/her education (McGrath & Van Bergen, 2015).

Another implication for teachers and for schools as a whole is to consider why some parents are not involved. Parents need to feel included in their child's education; yet, teachers and other school staff may be viewed as a barrier to involvement due to their attitudes toward parents (Hornby & Lafaele, 2011). Hornby and Lafaele proposed a model that categorizes barriers to parental involvement into four areas: individual parent and family factors, child factors, parent-teacher factors, and societal factors. The purpose of the model is to help education professionals understand the barriers to involvement faced by many parents and develop more effective practices to encourage parental involvement. The current study supports the application of such a model in educational practice.

Implications also exist for educational research. Students hold membership in multiple social categories, "which provide criteria for specifying how people are sorted or placed" (Anthias, 2012, p. 7), and these social categories shape each student's experience in life in general and specifically in education (National Association of School Psychologists, 2017). Theories or conceptualizations of intersectionality are used to examine how memberships in varying social categories intersect and contribute to social

inequality (Grant & Zwier, 2012). Perhaps stated best by Proctor, Williams, Scherr, and Li (2017), “Intersectionality provides a lens through which we can examine the processes, practices, policies, and structures that increase the risk of students experiencing disadvantage or discrimination because of their intersecting identities” (para. 18). For educational research to truly understand the lived experience of all students, intersectionality must be considered. One way to do so is to examine how membership in intersecting social categories affects educational opportunities through the use of a multi-level model that identifies social categories, recognizes the historical context (including spatiality and temporality) and evolution of social categories, and explores how social categories are related to each other and to education (Nunez, 2014).

Finally, those of us in educational research and policy must begin to reframe our thinking from focusing on the symptoms (high school dropout, in the case of the current study) to focusing on the causes. Welner and Carter (2013) point out that educational policy so narrowly concentrates on high-stake assessments that while attempting “to determine where students are, they ignore how they may have gotten there and what alternative pathways might be available for future students” (p. 3). How can we expect students to achieve at a certain level when we do not provide an equitable opportunity to do so? This implication is applicable to all school settings but more so in settings with disadvantaged students with intersecting identities placing them at the highest risk of facing discrimination or lack of opportunities.

5.4 Limitations and Future Research

Limitations

This study is not without limitations. The first stage was qualitative. As such, the themes identified were dependent upon both the individuals who attended each focus group and the structure and facilitation of the groups. An attempt was made to engage participants who represented students living in a rural community who would be most likely to allow relevant themes to emerge on dropping out of high school. Identifying potential participants based on specific criteria may limit the generalization since all of these individuals were from the same county, previously attended one of two high schools in the county, and were currently attending the same adult education program. Furthermore, because all of the focus group participants were currently enrolled in adult education, they may not be representative of other rural students who drop out of high school but do not enroll in adult education.

A potential limitation for many qualitative studies is the validity of the themes identified, as threats to validity may occur through haphazard processing, analysis, or interpretation of the narratives. Steps were taken to limit these threats by engaging in standardized procedures, such as the use of a transcription process and directed content analysis.

A third limitation of the qualitative study is that themes arose from the focus groups that could not be addressed by the data available in the ELS:2002 data. This limitation could be addressed in future research by the development of an instrument based on the themes from the current analysis.

Within the quantitative stage, the sample size of rural youth who had dropped out of high school was fairly limited. Additionally, due to the sampling design of the ELS:2002 study, many schools may not have had students who dropped out included in the data collection.

Another limitation to consider is that the ELS:2002 study was initiated 20 years ago. The landscape of education has changed, and the particular challenges faced by students likely have as well. This limitation could be addressed by recreating the current study with a more recent national survey. For example, the Middle Grades Longitudinal Study of 2017-18 (NCES, 2022) follows students as they move through middle grades, then transition to high school and beyond. Students in the MGLS:2017 study will be high school seniors in the 2023-2024 school year.

Future Research

Rather than using the lens of attribution theory, future research would benefit from exploring other theories of motivation. Self-determination theory suggests students are able to be engaged and persistent when their needs for autonomy, competence, and relatedness are fulfilled (Deci & Ryan, 1985). These needs do not seem to be met for many students who are lacking parental guidance or teacher-student connections. Expectancy-value theory (Wigfield & Eccles, 2000) may be useful in future research. Within expectancy-value theory, task value is viewed as either attainment value (importance is placed on doing the task well), intrinsic value (task brings enjoyment), cost (time taken away from other activities, effort, emotional cost), and utility value (importance of task for meeting future goals). The latter seems to apply in the current study. It took dropping out of high school for several participants to see the utility value

in returning to school and entertain ambitions of moving forward with their education. Future research could explore how to instill the utility value of high school completion to avoid the dropout situation. Elements of social learning theory are also present, as social learning theory states we learn by observing others (Bandura, 1977). Social learning theory could shed light on how parental educational attainment plays a role in the high school dropout/completion of youth living in persistent poverty.

Some specific recommendations for future research include recreating the qualitative stage of the current study with samples of students from all geographic locales and also using a qualitative approach to explore parents' perceptions of their inclusion and solicitation for involvement in their child's education. Research examining differences across geographic locales would also benefit from a clear understanding of how the breakdown of races/ethnicities differ by locale. For example, Native Americans are overrepresented in rural areas (Logan & Burdick-Will, 2017). Additionally, intersectionality must be at the forefront of future research, as acknowledging intersectionality in educational research is imperative to ensuring educational equity and overcoming the opportunity gap.

A final suggestion for future research is to explore the impact of the COVID-19 pandemic on high school dropout/completion. Early reports suggest high school graduation rates were largely unaffected by the pandemic (Harris & Chen, 2022); however, research should continue to explore the long-term impact of the pandemic and, in particular, should look for possible differences between geographic locales.

5.5 Conclusion

Increasing and maintaining high school completion rates will always be a worthwhile goal, as higher educational attainment is linked to greater wealth, better health overall, higher employment rates, and lower likelihood of criminal behavior (Bonnie et al., 2015; Christle et al., 2007). High school completion is a necessary step in that process. Therefore, the purpose of the current study was to examine attributions for high school dropout, as identified by rural students who dropped out of high school, and then further examine how these factors may be involved in dropout among a national sample of youth from urban, suburban, and rural geographic locales.

This study emphasized the importance of parental involvement and the teacher-student relationship for students from all geographic locales. Whether internal or external, the themes identified in the qualitative stage tied back to social attributions, especially the influence of parents and teachers. In the quantitative stage parental involvement and teacher-student relationships were predictive of dropout for the entire sample and for the urban and suburban students. This is not surprising given the research indicating the wide-ranging impact of parental involvement and teacher-student relationships to educational outcomes (Benner et al., 2016; Fan & Williams, 2010; McGrath & Van Bergen, 2015; Ross, 2016; Rubie-Davies, 2010), but it does provide support for the development of programs and professional development aimed at increasing parental involvement and enhancing teacher-student relationships.

Another contribution of the current study is that it adds to the small body of literature investigating rural high school dropout from the perspective of the student and highlights the need for future qualitative research on the topic. While national studies

have been conducted using objective measures on reasons students drop out of high school, such studies do not specifically examine the role of geographic locale or obtain input directly from rural students as to their perceptions of factors related to high school dropout. A few qualitative studies looking at rural high school dropout are available in the literature (Chinyoka, 2014; Derdar, 2014; Oruko et al., 2015; Tyler, 2011; Zabloski & Milacci, 2012); however, they are limited in generalizability.

Finally, the current study supports the need for educational research to recognize that explanations for high school dropout behavior cannot rely solely on single student factors. Students cannot be placed into boxes based on one characteristic or another, rather the intersection of multiple student, school, and community factors should be considered (Marchbanks et al., 2018; Storer et al., 2012; Triplett & Ford, 2019). Furthermore, educational research and policy should focus less on outcomes (i.e., achievement) and more on input (i.e., opportunity) if we truly want to affect change in educational practice that will help all students succeed academically and reverse the downward cycle for the most disadvantaged students.

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APPENDIX A

FOCUS GROUP QUESTIONS

1. Tell me about why you left high school.
 - a. Follow-up question: What would you have needed to stay in school?
2. What led you to enroll in adult education?
3. Thinking back to the best you have ever performed on any school assignment or test, what do you think led to you being successful?
4. Thinking back to the worst you have ever performed on any school assignment or test, what do you think led to your failure?
5. What do you think is the most important reason students do not complete high school in this county?
6. What is the next most important reason?
7. If you could make changes that would help kids who are having a hard time in school, what would they be?

APPENDIX B

ELS:2002 BASELINE STUDENT QUESTIONNAIRE

The following description was taken from the ELS:2002 Base Year Data File User's Manual.

ELS:2002 Base Year Data File User's Manual

The locating information section primarily gathered information needed for future follow-up; however, it also elicited data that have been used in the creation of some of the standard classification variables for the study: date of birth, sex, Hispanic ethnicity, race, and Asian or Hispanic subgroup.

By far the longest section of the student questionnaire was the module on school experiences and activities. The principal content strands in this section inquire about school climate, student recognition, school disengagement behaviors (tardiness, classes-cutting, etc.), perception of high school program placement (academic, general, or vocational track), attitudes toward school and motivation for attending school, learning environment of the math class, use of computer technology, receipt of special services, time spent on homework, importance of grades to the student, school-sponsored activities (sports and extracurricular activities), time spent in reading and outside activities (including television viewing and video games), and use of the library media center. There are also questions (with parallels on the parent instrument) about close school friends and their parents that are intended, among other uses, to measure aspects of embeddedness in social networks that might be a source of social capital.

The third module of the student questionnaire concerns plans for the future. Many elements of the series of life goals questions have been asked since NLS-72. Another question series concerns the persons who have the most influence on the sophomore's plans for the time after high school graduation. Questions are also asked about educational attainment - both the sophomore's perception of parental aspirations for them as well as their personal expectations for highest level of education to be completed. Several items ask about planning for postsecondary education, such as plans for taking the Scholastic Assessment Test (SAT), American College Test (ACT), or other tests, and where students obtain information about various colleges. Other items ask about their desired job after high school (if going directly into the labor force) or job/occupation at age 30, when most cohort members will have completed their postsecondary education and most will have assumed occupational roles.

The section on language use is aimed at students for whom English is not their native language. Items attempt to identify the native language and to address issues of language acquisition, usage, and the extent to which students' limited English skills affect academic achievement, aspirations, and opportunities. These data can be linked to parent questionnaire data on length of residence in the United States and immigration history.

The module on money and work provides information to identify the type and amount of work that sophomores are engaged in after school and on weekends. Questions are asked about employment type, hours worked, wages earned, participation in work-based learning programs, how students got their job, and whether the job is related to what they would like to do in the future.

The section on the sophomore's family contains questions that will render information about the student's family background and characteristics. Even though redundant with the parent questionnaire, questions are asked about the education and occupation of students' parents. A number of items ask about parental monitoring, as perceived by the student, including checking on homework, limiting of television viewing time, requirements such as chores, limitation of amount of time going out with friends on school nights, and so on. An additional question series gets at the frequency of student-parent discussions on various topics (course selection, grades, college planning, etc.).

The final section of the student questionnaire is a module on beliefs and opinions about self. Included are a number of psychological scales, which have been adapted from PISA:2000. The scales are: (1) instrumental motivation (utility interest); (2) intrinsic interest (specific to mathematics and to English); (3) general control beliefs and expectations concerning the student's capability to perform a task; and (4) self-efficacy (specific to mathematics and to English). A further strand of content concerns peer relations and friends' behaviors, dropout propensities, and values.