

**RESILIENCE FOR WOMEN PURSUING HIGHER EDUCATION**

**FACTORS CONTRIBUTING TO RESILIENCE FOR WOMEN**

**PURSUING HIGHER EDUCATION:**

**A FOCUS ON CENTRAL APPALACHIA**

by

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## DEDICATIONS

This manuscript is dedicated to the life and memory of my mother, Charlotte McCray Scalf, who was the original source of inspiration for my educational endeavors and my example of everything that is possible when you work hard and never give up.

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# RESILIENCE FOR WOMEN PURSUING HIGHER EDUCATION

## ABSTRACT

### FACTORS CONTRIBUTING TO RESILIENCE FOR WOMEN PURSUING HIGHER EDUCATION: A FOCUS ON CENTRAL APPALACHIA

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The Central Appalachian region of the United States is steeped in history and culture. Family influences and rich traditions impact daily life and interactions on a regular basis. Women of Central Appalachia are the backbone of the culture that characteristically overlooks the need for opportunities for personal and professional development. Geographical and economic factors also influence whether women pursue development opportunities, including training and higher education. The New Opportunity School for Women, founded by Jane Stephenson, provides a unique opportunity for women to improve their circumstances by enrolling in a program that fosters self-esteem, personal achievement, provides social support, and appreciation for their roots while establishing a foundation for their future. This study seeks to examine factors that contribute to resilience for these women who are identified as older, non-traditional students. By examining data obtained from current and past participants, as well as outcomes from assessment through The Resilience Scale and the Satisfaction with Life Scale, protective effects as well as the influence of other factors are reviewed in detail. A review of the literature and implications for future research is included.

*Keywords:* rural education, non-traditional students, resilience in adult women, Central Appalachia, rural resilience

## FACTORS CONTRIBUTING TO RESILIENCE FOR WOMEN PURSUING HIGHER EDUCATION: A FOCUS ON CENTRAL APPALACHIA

The mountains of Appalachia have been the back drop for films, television shows, works of fiction and non-fiction, and theater productions. Geographically, the Appalachian region provides some of the most beautiful scenery one can see in the United States. Intricate paths, streams, rivers, and lakes are tucked away among rolling mountain ranges that appear blue on the horizon. In addition to beautiful scenery, the Appalachian region is steeped in culture and history. However, the mountains are a façade for the years of economic hardship and struggles that are reality for many who live in rural Appalachia.

The Appalachian region spans 200,000 square miles from northern Mississippi to southern New York, and encompasses 406 counties (Owens, 2000). The area is economically diverse with several urban areas, including Roanoke, Knoxville, Pittsburgh, Birmingham, and Asheville. Central Appalachia, a subsection of the greater region, is the focus of this study. The central region encompasses 215 counties which are in parts of Kentucky, Ohio, Tennessee, Virginia, western North Carolina, and all of West Virginia (Mather, 2004). The topography is primarily rural, and residents are “significantly less racially and ethnically diverse” when compared to other regions in the United States (Pollard & Jacobsen, 2011, p. 15). According to the 2010 Census, the demographic of central Appalachia is largely homogeneous with 95.4% of the total population being white/not Hispanic. For the entirety of Appalachia, 83.6% of the total population is white/not Hispanic (Pollard & Jacobsen, 2011).

The homogeneity of the rural landscape of central Appalachia is relevant for the purposes of this study which seeks to identify factors that foster resilience in nontraditional female students from the region who decide to pursue personal and professional development through

higher education. Gender-biased attitudes, familial structures, and cultural beliefs are just a few of the influences women from this area must face when making the decision to obtain a higher education. Research on Appalachian women in general is limited (Egan, 1993) and “problems and opportunities associated with living and working in rural areas merit attention” (Brown & Schnafft, 2011, p. 11). Lack of higher education may be a problem for women living in central Appalachia, but there is value in looking at opportunities for improving one’s circumstances due to the changing economic landscape of the area. This study seeks to identify which factors contribute to resilience of nontraditional female students in rural, central Appalachia who pursue higher education. Women desiring higher education and training were chosen as subjects in this study because previous research indicates education and training may be a deterrent to poverty.

### **Researcher Positionality**

This study is relevant for several reasons, but I believe it is important for readers to know this study is close to my heart since I am a female, first-generation, non-traditional college student from rural, central Appalachia. I was born in Pike County in eastern Kentucky and lived in Washington County in southwest Virginia for over 20 years before moving to Fort Worth, Texas. I am familiar with the area and the various struggles women encounter when deciding to enroll in college. The pursuit of higher education for Appalachian women often requires a departure from cultural norms including gender-related expectations and family input (Egan, 1993). I identified the New Opportunity School for Women (NOSW) as one such program that allows women from central Appalachia to improve their personal and professional circumstances by opening doors for education that would not otherwise be attainable.

### Research Purpose and Guiding Questions

This study has an overarching hypothesis that higher levels of resilience for women who attend NOSW are predicted by *a priori* factors such as access to transportation, access to childcare, life satisfaction, and the presence of social support. Research questions related to the identification of variables contributing to participants' levels of resilience are as follows:

How do variables identified in the literature (i.e., number of family members with a college degree, access to childcare, access to transportation, presence of a support network, and score on Satisfaction with Life Scale) predict participant levels of resilience?

Hypothesis: The combination of these variables will predict resilience at a level of statistical significance.

How does participants' life satisfaction predict levels of resilience?

Hypothesis: Measures of life satisfaction will predict participant's resilience level.

By looking at variables that may contribute to overcoming adversity, the research questions assist in identifying which factor(s) are likely to promote resilience. Examples of adversity include, but are not limited to, lack of reliable transportation, lack of reliable childcare, and social isolation. A study on access to medical care for women from rural central Appalachia found that 71% of women identified lack of reliable transportation as a primary barrier to services (Studts, Tarasenko, & Schoenberg, 2012). Hastings and Cohn (2013) identified fewer transportation options and "difficulty accessing transportation" as challenges associated with rural mental health practices (p. 38). Regarding reliable childcare, Mather (2004) found that the lack thereof is an ongoing issue for families, especially those with single mothers in Appalachia. Individuals with low socioeconomic status are exposed to more life stressors on regular basis (Dorfman, Mendez, & Osterhaus, 2009; Turner & Avison, 2003) and lack of reliable, trustworthy

childcare is just one of these stressors. Social isolation may also contribute to stress and adversity for women who live in rural areas. Social support from family, friends, neighbors and general community was helpful to a sample of older women from a rural area who identified coping strategies for isolation (Dorfman et al., 2009), and the support included sharing childcare responsibilities, sharing transportation, meal preparation, and occasional financial assistance. The value of informal social networks in rural communities is complementary to support programs and other services that may be limited due to geography. Two decades ago, another relevant study found that for women living in central Appalachia, support services must go hand in hand with job training initiatives. The study identified childcare and transportation as the most needed services (Maggard, 1994).

### **Theoretical Framework**

Collectively, the theoretical framework for this study highlights the importance of identifying factors that contributes to the overall resilience of the individuals instead of focusing on deficits. An abundance of professional literature examining the deficits and challenges experienced by women from central Appalachia already exists, and while the challenges these women face are valid, the primary goal of this study is to identify factors that predict overall resilience. Research on the process of adult resilience is limited, especially regarding which protective factors moderate risk factors for females living in geographically isolated areas. *A priori* factors for this study include access to transportation, access to childcare, number of family members with a college degree, life satisfaction, and having a support network. Each factor is explored in more detail in Chapter Two.

## **Background of Study**

The New Opportunity School for Women (NOSW) was founded in 1987 by Jane Stephenson, whose husband, John Stephenson, was the newly elected president of Berea College in Berea, Kentucky. Born in rural Appalachia near Banner Elk, North Carolina, Mrs. Stephenson had a vision for helping women in need, particularly those with limited job skills and educational training. In a culture where low educational achievement has been the norm; especially for women, this project was no easy task. The program grew out of a dire need for women in rural Appalachia to not only become employed but also better educated. With over 700 graduates since its inception (Stephenson, 2013), the school offers hope for new beginnings and more possibilities for women from this region. Hope “remains problematic” (Owens, 2000, p. 179) not only for women but for many people in the area. Stories shared by participants who attend NOSW sessions indicate that overwhelming life circumstances continue to plague women from central Appalachia, including poverty, domestic abuse, dropping out of school, inadequate housing, lack of healthcare, and low self-esteem (Stephenson, 2013). Although this is not an exhaustive list of issues that women bring when enrolling in NOSW, the recurring identification of so many of the same problems through the years indicates conclusively a need for a program like NOSW. Nearly every NOSW participant’s story identifies increased hope and an increase in opportunities for development from attending the program (Stephenson, 2009; 2013). Identifying what contributes to resilience for these women is critical as it is clear from their stories that they are motivated to change their circumstances. As one graduate wrote: “I went from a sixteen-year old dropout to a forty-six-year-old grandmother of eight and a college student. It’s all because of my three weeks at NOSW and all the support around me” (Stephenson, 2013).



Due in part to geographical barriers and limited transportation for potential participants in North Carolina who could not attend NOSW in Berea, the school found a second home at Lees-McRae College in Banner Elk, North Carolina in 2005. Lees-McRae prioritizes service and learning. The motto that guides education at Lees-McRae: “In the mountains, of the mountains, for the mountains” (Stephenson, 2013, p. 133). Stephenson is a graduate of Lees-McRae, so it is appropriate for another NOSW program to be situated in this area. A third program was opened in 2013 in Bluefield, Virginia at Bluefield College. A fourth program recently opened in 2014 at Maryville College in Maryville, Tennessee. All four schools hosting the New Opportunity School for Women are private, liberal arts institutions located in or near central Appalachia.

Prospective enrollees in NOSW are usually between the ages of 30 to 55 and lack higher education and formal job training. Enrollees must have either a General Education Diploma (GED) or high school diploma and be considered low income according to federal poverty guidelines for households. Enrollment criteria was established by the needs of Mrs. Stephenson’s friend who was the original inspiration of NOSW: lack of education, formal job training, and the financial resources to better her circumstances. Consistent with age requirements for enrollment into the NOSW, census data provides insight into the lack of educational attainment in the central region for adults. The 2010 census indicates that 20.4% of adults over the age of 25 living in the Appalachian region have a bachelor’s degree or higher, but in Central Appalachia, the percentage drops significantly to 11.9% of adults (Pollard & Jacobsen, 2011). Thanks to Mrs. Stephenson’s vision, women have a greater chance of improving their circumstances through education, training, and ongoing support through NOSW. By looking at outcome measures of resilience, life satisfaction and data from participant surveys, this study identifies which factors have the greatest impact on women who choose self-improvement

despite adversity. Chapter Two provides a thorough examination of literature on resilience and life satisfaction, including a list of operational terms, and discusses the various cultural, economic, geographical, and social contexts that influence the lives of females in rural central Appalachia.

### **Significance of Study**

The mission of the NOSW aligns with the idea that education and training is a deterrent to poverty. In Edin and Lein's (1997) study of 118 low income mothers, 42 percent identified "some type of further [job] training was essential for self-sufficiency" (p. 82). Another agency dedicated to shedding light on the importance of higher education and training for women is the Appalachian Regional Commission (ARC), founded by Congress in 1965. Low income, high unemployment, and deficits in education were three of several factors addressed in President Johnson's Appalachian Regional Commission Report (1964). The commission recognizes education and training as essential to the success of individuals living and working in rural Appalachia. On a smaller scale in select areas, NOSW has a three-week curriculum that incorporates classroom instruction with field experiences in the form of internships. The work in the classroom is an essential component for successful completion of the program, but the ability to participate in live job training is even more critical. For many women, the training received through the internship may be their first experience working in a particular field of interest (Meg Quinn, personal communication, May 30, 2016). While attending a session with NOSW, participants also participate in classes on enhancement of self-esteem, awareness of civic responsibilities, basic computer skills, expansion of knowledge about Appalachian culture through literacy and cultural experiences, and interview skills development (Meg Quinn,

personal communication, May 30, 2016; Jane Stephenson, personal communication, November 15, 2015).

The Appalachian Regional Commission has several initiatives for both job training and higher education. The Appalachian Higher Education Network (AHE), established in 1993 with the goal of working with high school students to improve likelihood of college enrollment, is one such initiative. Since 1998, ARC has established centers in Alabama, Kentucky, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia, and collectively, the programs have achieved high rates of success in promoting college enrollment for students from rural areas throughout Appalachia (Schwartz, 2004). The AHE is similar to TRIO programs, a federal initiative of three student support services programs designed to work with students as they apply for college and work on completion of their bachelor's degree (U. S. Department of Education, 2016). TRIO has since grown to encompass eight programs that promote enrollment in higher education for low-income students. Although AHE and TRIO programs are valuable for the youth in Appalachia, the women who qualify to attend the NOSW would not be eligible for either program due to their age. A review of available resources indicates there is no other program like the New Opportunity School for Women in the Appalachian region.

### **Definition of Common Terms**

A list of common terms and definitions is necessary for the reader to have a clear understanding of terminology used throughout the study.

Central Appalachia: A sub-region of Appalachia with defined counties in southeast Ohio, all of West Virginia, eastern Kentucky, southwest Virginia, east Tennessee, and northwest North Carolina. Many of the counties in this sub-region are considered distressed (Pollard & Jacobsen, 2011).

Coal Mining: An area of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, tunnels, excavations, and other property, real or personal, placed upon, under, or above the surface of such land by any person, used in, or to be used in, or resulting from, the work of extracting in such area bituminous coal, lignite, or anthracite, from its natural deposits in the earth by any means or method, and work of preparing the coal so extracted, and includes custom coal preparation facilities (U. S. Department of Labor Mine Safety and Health Administration, 2016; retrieved from [arlweb.msha.gov](http://arlweb.msha.gov)).

Distressed County: A designation used by the Appalachian Regional Commission to identify counties with the most structurally disadvantaged economies. Distressed status compares the poverty, unemployment, and per capita market income of Appalachian counties with national averages. A county qualifies as distressed if the poverty rate and its unemployment rate are greater than or equal to 150 percent of the national average, and its per capita market income is less than or equal to 2/3 of the national average (Pollard & Jacobsen, 2011).

Low income: An individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount (U. S. Department of Education, 2000).

Nontraditional Student: Age (over age 24) is the defining characteristic, as well as other variables such as family and work obligations, life circumstances that may interfere with successful completion of educational objectives, race and gender variables, residence (commuter vs. non-commuter), level of employment, and enrollment in non-degree seeking occupational programs (U. S. Department of Education, 2002).

Rural: All population, housing, and territory not included within an urban area. According to the U. S. Census Bureau, there are two types of urban areas: one is any area with more than 50,000

people; the other is known as an urban cluster with at least 2,500 and less than 50,000 people (United States Census Bureau).

**Surface Mining:** A method known as “blasting” where coal reserves covered by rocks are broken with explosives and excavated with various types of large earth-moving equipment. This is informally known as “strip mining” in Appalachia (U. S. Department of the Interior Office of Surface Mining Reclamation and Enforcement, 2016).

**Sustainable Development:** An asset-based strategy that builds on existing resources – natural, cultural and structural – to create valued products and services that can be sustained for local benefit (Sarafin & Widener, 2015).

Movies, television, and to some extent professional literature paint a somewhat grim way of life for individuals whose roots run deep in the mountains of Appalachia. Images from the area that were published following the declaration of the war on poverty still permeate society and give an inaccurate portrayal of individuals from the area. Pictures such as these contribute to pervasive stereotypes and negative opinions of central Appalachia. People who call the area home undoubtedly face unique challenges, but the grit and determination of those who have chosen to stay is worthy of study. Viable options for job training, educational opportunities, and community support for sustainability initiatives are fostering a new sense of place and purpose for central Appalachians.

## CHAPTER TWO: LITERATURE REVIEW

The purpose of this study is to identify factors that foster resilience in women who have a desire to improve their circumstances through higher education and training. Professional literature is lacking on what motivates non-traditional female students from central Appalachia to pursue higher education. A thorough review of the professional literature found a plethora of reasons why women from this region do not take advantage of various avenues of self-development, including higher education. Gender-biased beliefs, familial structure, cultural norms, and economic disparities are just a few of the barriers women from this area face that could have a negative impact on their desire for a college degree. Therefore, the unique challenges associated with living and working in rural areas merit more attention (Brown & Schnafft, 2011). This study expects to identify factors that contribute to resilience among the female participants based on identified themes in the literature that discuss challenges considering cultural, geographical, economical, and social influences on women in central Appalachia. Research on said challenges and resilience, a strengths-based construct, provide the framework for this study.

### **Operational Definitions**

To ensure clarity and understanding for the reader, operational definitions related to the study are detailed here. The terms “measure” and “scale” are used interchangeably when discussing the Resilience Scale and the Satisfaction with Life Scale.

- Life satisfaction is largely subjective in this study. Diener, Emmons, Larsen, and Griffin (1985) describe it as “a cognitive, judgmental process...judgments of satisfaction are dependent upon a comparison of one’s circumstances with what is

thought to be an appropriate standard” (p. 71), which this study will adopt operationally.

- Resilience “connotes emotional stamina and has been used to describe persons who display courage and adaptability in the wake of life’s misfortunes” (Wagnild & Young, 1990, p. 253). This definition closely aligns with this study’s purpose.
- A risk factor is not uniform and is something “that could lead to distress and potentially deleterious outcomes” (Johnson & Weichelt, 2004, p. 660)
- Protective factors are also not uniform but seek to moderate the negative effects of risk factors (Rutter, 1990).

### **Historical Issues**

Contextual issues with geographical isolation, economic disparities, and infrastructure are found in several sources on Appalachian history. These issues relate to decades of struggle dating back to pre-Civil War years, including violent mine strikes, high mortality rates for babies and children, extreme poverty and substandard housing, tenant farming, and lack of education (Bhatraju, 2013; Caudill, 2001; Dunaway, 2008; McGuire, 2010; Wake, 2001; Weller, 1965). The dire need for income was heavily favored over education. This study begins with a review historical issues beginning in the 1960’s, when the plight of rural Appalachia was brought into the spotlight through photographs from the War on Poverty (Ginsberg, 2006) and concrete initiatives were put in place to help people from the area. Leaders at the national level recognized Appalachia needed substantial support, education, and training which closely relate to the current mission of the NOSW.

President Kennedy dedicated time and energy to publicizing the struggles faced by rural Appalachians following his election in 1960 by declaring a war on poverty (Ginsberg, 2006).

The President's Appalachian Regional Commission (PARC), created by President Kennedy on April 9, 1963, consisted of representatives from each of the federal departments and agencies as well as governors from each Appalachian state. He organized the commission "to prepare a comprehensive action program for the economic development of the Appalachian region" (Roosevelt, 1964, p. 4). The commission provided a valuable opportunity for governors to give a voice to what was going on in their respective states.

President Kennedy's life was regrettably cut short before he could see the work of the commission fulfilled. However, President Johnson took over the initiative after visiting impoverished areas in central Appalachia including West Virginia and eastern Kentucky. Although many federal, state, and local entities collaborated and were willing to help, PARC's initial conclusion was that a long-term federal solution would be needed for the sustainability of development and progress (Roosevelt, 1964). The result was the creation of a federal agency, the Appalachian Regional Commission (ARC), founded on March 9, 1965 as part of Public Law 89-4 (Owens, 2000). Immediate goals of the agency established initiatives to counteract poverty, high unemployment rates, and other economic issues in all or part of 13 states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia (Stephenson, 2013). At the time of its inception, "one in three persons lived in poverty with a per capita income 23 percent lower than the national average" (Nation, 2008, p. 102) and staggering rates of unemployment due to mine layoffs which led to countless families moving away from the area (Owens, 2000).

Struggles between unions and mine workers are evident throughout history in the region, but the closures of coal mines, surface mines and lumber mills in the 1960's coincided with President Johnson's Economic Opportunity Act of 1964 (McGuire, 2010). For families who



stayed in the area, men who had lost jobs had to move out of the home for the family to receive any form of public assistance. Appalachian women, who were already identified as tenacious and enterprising in homemaking, began providing income for their families by getting jobs at the local businesses such as sewing factories or department stores (McGuire, 2010). Women in Appalachia are characterized by strong motivation and willingness to take care of their families, but historically, the provision of opportunities for those who are equally motivated to achieve educational goals while caring for their families has been limited (Reed & Smith, 2010). Therefore, these individuals are forced to choose between taking care of their families or pursuing personal and professional development. Such choices are evidenced throughout the stories of women who completed NOSW (Stephenson, 2009; 2013).

Despite a historical context that has not been favorable for women from the region pursuing higher education, legislation over the last 30 to 40 years resulted in several educational and training initiatives for the enhancement of life circumstances. Even though coal mines and related businesses recovered somewhat from the layoffs in the 1960s, the last 20 years have seen a vicious cycle of layoffs and rehiring for the industries. In addition to loss of coal jobs, many manufacturing companies in central Appalachia were closed in the last decade, and the once thriving tobacco industry has become virtually nonexistent. With multiple threats to the livelihood of families because of job loss, new opportunities for education and training were essential.

President Clinton signed the Workforce Investment Act (WIA) on August 7, 1998 and the final rules and regulations were adopted on August 11, 2000. WIA reformed and superseded previous job training programs by creating a new workforce investment system for individuals to have improved access to services, tools, and training needed for career development (U. S.

Department of Labor, 2000). WIA combined education and training to prepare people for work, which included career counseling, job search assistance, skills training, college courses or professional certifications, and hands-on job training (Bradley, 2013). WIA also established appropriations for the Adult Education and Family Literacy Act of 1998.

Specific training, education and related services under WIA for adult and dislocated workers, which apply to many in central Appalachia, are critical for helping motivated individuals return to the workforce and break the crippling cycle of poverty. WIA case managers work with participants on three levels: Core Services, Intensive Services, and Training Services. Work and engagement at each level are required before moving on to the next, but due to the individualized nature of each service, the amount and type of work done is different for everyone. According to Bradley (2013), core services include assessment of needs and skills, outreach, job assistance, referrals for support services, and information on the current job market. Intensive services include development of an Individual Employment Plan (IEP), career planning, case management, and prevocational services training. These services include on-the-job training, training for entrepreneurs, workplace and classroom instruction, and other customized options for professional development.

Rural institutions for higher learning like the ones that host the NOSW programs are paramount to the communities in which they are located. The Rural Community College Initiative (RCCI) was established in 1994 with nine colleges in its pilot program. Fifteen more were added in 1997, four of which were in Appalachia (Jensen, 2003). Since colleges respond in a variety of ways to community needs, the initiative found that “rural colleges usually have the least resources and the highest needs due to serving economically marginalized areas” (Jensen, 2003, p. 3). The goal of the RCCI was to explore strengths of the rural areas while assessing for

needs, using grant money given to the colleges as a catalyst for community-based programming and leadership development (Carter, 1999).

It is common for education and training programs like WIA and those established through RCCI - renamed the Rural Community College Alliance [RCCA] in 2001 - to be located on college campuses (Jensen, 2003). The programs offer a variety of certification, training and professional development programs, and on-the-job training through community-based partnerships with prospective employees and organizations. Local libraries in the region offer adult literacy programs to strengthen reading and language, as well as free computer classes to help individuals learn basic technological skills. The Southwest Virginia Higher Education Center has a College for Older Adults that offers six week courses in computer applications, self-care and wellness, and finance, among others. The Center also offers a variety of other professional development courses, teaches non-degree classes in technology and medical coding, and houses a leading culinary arts program. There are an increasing number of options for individuals from the region to pursue education and training.

A final initiative worth noting is the Southwest Virginia Higher Education Center (SWVHEC), created in 1992. Located in Abingdon, Virginia, SWVHEC is one of the lasting solutions that has proven life-changing for countless individuals in the Appalachian region and beyond. It is the first multi-college and university center for higher education in the Commonwealth of Virginia and houses distance learning sites for seven major state universities including the University of Virginia and Virginia Tech. Degree programs are available for bachelor's, master's, and doctoral level coursework, and students can complete their studies at the center without having to travel to the main campus of their chosen university. This is ideal for those who may not have the ability to move away from home or have limited transportation.

Advisors and directors from each school work with students daily. The center is also being used locally to further several economic development initiatives in the region (Israel O'Quinn, personal communication, September 1, 2016).

There are more education and training opportunities for single mothers and displaced workers in central Appalachia than ever before. This is a positive trend since adults from geographically isolated areas typically have lower levels of education than those in metropolitan areas (Brown & Schafft, 2011). Despite legislative gains promoting education and training while combatting poverty in the area, the biggest obstacle may be one that cannot be overcome by congressional acts or presidential decrees: the cultural beliefs and norms that have defined expectations for women in the region for decades.

### **Cultural Issues and Expectations**

As evidenced in professional literature, women from rural Appalachia face a variety of challenges when making the decision to pursue higher education. One such challenge is opposition from family and community members regarding post-secondary education. Contrary to dominant patriarchal beliefs, women in central Appalachia are viewed as leaders in their families who must be "strong and resourceful" in times of hardship and prosperity alike (McGuire, 2010, p. 34). Leaving the home to pursue additional education or training changes the dynamics for everyone who lives there, including the woman, a point often overlooked. Women's studies programs often ask why females should carry the load for both household and childcare responsibilities if it limits their ability to take on other roles (Sleeter & Grant, 2009).

A study regarding family of origin found that female students from a section of rural Appalachia received "discouraging messages regarding the pursuit of higher education...and the messages originated within the family" (Wallace & Diekroger, 2000, p. 142). The same study

also found that within the Appalachian culture, family influences impacted a woman's decision to attend college. A longitudinal study of females from southeast Appalachia found "women receive less encouragement than men to pursue higher education" from their families of origin (Wilson, Peterson, & Wilson, 1993, p. 161).

Families typically live close together and are not overtly welcoming to individuals who are not from the area, but they are willing to share the care of elders, children, home repairs, and transportation assistance among relatives and community members (Bhatraju, 2013; Maggard, 1994; McGuire, 2010; Rezek, 2010). Unconditional loyalty to family and strong roots in a particular geographical area are integral parts of Appalachian culture, so an awareness of the family's impact on decision-making for women is relevant to this study. Brown, Copeland, Costello, Erkanli, and Worthman (2009) found that having insight into the impact of family and neighborhood influences is essential for understanding the "complexity of influences" (p. 797) for educational achievement in rural Appalachia.

Currently, familial structure in Appalachia is relatively diverse due to an increasing number of older residents, which has fostered the rise in single-person households in Appalachia and "has extended the length of family relationships, leading to more multi-generation households and more grandparents caring for grandchildren" (Mather, 2004, p. 1). Single-parent families and households headed by females have also increased since the 1990's, and the number of children born into non-marital relationships has also risen (Lichter & Cimbula, 2010). Even though families are becoming increasingly diverse and social support among relatives and faith groups is found in rural communities, the construct of gender bias presents yet another challenge for women from the area.

**Gender bias.** When a woman in central Appalachia chooses to pursue higher education, she also decides to step outside of the cultural expectations for gender-based stereotypes and family role expectations (Egan, 1993). For many from this region, deciding whether to attend college is not as simple as completing an application because not everyone comes from a family that supports higher education and training. Gender bias and restrictive generational beliefs about a woman's role in the home are pervasive and may prevent a woman from pursuing any opportunity for self-improvement. "Gender-based divisions of labor infiltrate so that women are largely concentrated in nursing, clerical, and teaching roles that are viewed as extensions of their domestic roles" (Reed & Smith, 2010, p. 91). Women struggle to balance goals for work with cultural and familial expectations of home and childcare responsibilities, and any decision that is made to pursue higher education is often heavily influenced by parents (McGuire, 2010).

Issues with gender-based divisions of labor are evident in professional literature regarding this population, although it appears that problems with gender biases are becoming less pervasive due to the rise of female-dominated service jobs (Latimer & Oberhauser, 2004; Oberhauser, 1995; Rezek, 2010). With regard for another aspect of traditional gender roles, Rezek (2010) found in a study of unwed teenage mothers from West Virginia that the identified primary support person was the teen's mother, whereas fathers (of the pregnant teens) were significantly less involved, if at all, until after the birth of the baby.

A decline in two-parent households was identified by the 2010 Census and has further compounded issues single-female parents face when attempting to secure employment or enroll in school. Latimer and Oberhauser (2004) found divorce was another factor that could limit a female's job options because childcare responsibilities remain the responsibility of the woman, who would often have to settle for part-time employment in place of stable, full-time work. The

“average median income for part-time female employees in central Appalachia is \$10,358 annually” (Latimer & Oberhauser, 2004, p. 283).

Whether the household has a single parent or both, Wilson et al. (1993) found that women’s occupational goals are “secondary to what is gender-stereotyped for women” (p. 172). This longitudinal study found that women were settling for less than ideal jobs regardless of the woman’s age of marriage or childbearing. Although traditional gender roles have been part of the cultural fabric of the Appalachian region for decades, this trend is changing as more women become educated, have improved access to training and childcare, and gradually move into employment positions with fewer stereotypes. It appears there is potential for change in the cultural narrative.

**Poverty.** In addition to family influences on gender roles for occupations and the decision to pursue higher education, poverty is another factor that must be considered when examining cultural and social contexts of the region. Of the 406 counties that make up all of Appalachia, the ones where poverty is the most concentrated are in the central region, where almost half of the population experience poverty rates of at least 20% (Pollard & Jacobsen, 2011). Lichter and Johnson (2007) found that children from rural areas have a higher propensity for living in poverty than children from more urban areas. The combination of a struggling economy and higher poverty rates indicate that lower socioeconomic status will impact post-secondary education (Demi, Coleman-Jensen, & Snyder, 2010). Level of education is one of the “strongest predictors of poverty” (Brown & Schnafft, 2011, p. 196). Issues that accompany poverty-laden areas include lack of available transportation, low educational achievement, lack of affordable healthcare, and families living together to share and preserve resources (Maggard, 1994; McGuire, 2010; Orthner et al., 2004; Stephenson, 2013; Wallace & Diekroger, 2000).

Lower educational achievement is representative of factors such as access to transportation and preservation of resources. For families who are already struggling to pay monthly bills and conserve gasoline, it is highly unlikely education is a priority.

According to 2010 Census data and an American Community Survey conducted by ARC between 2010 and 2014, approximately two million adults between the ages of 25 and 64 are living in poverty in the Appalachian region in its entirety. For the same age group in the central region, there are approximately 220,000 individuals living in poverty (Pollard & Jacobsen, 2016). The average annual family income in Appalachia for the same survey was \$70,988 but was significantly lower for families in the central region at \$55,645 (Pollard & Jacobsen, 2016).<sup>1</sup>

The Census Bureau makes a distinction between household and family income that is relevant to this study because the number of dependents under the care of the individual is identified on the participant survey. A family is defined as “two or more people (with one being the householder) related by birth, marriage, or adoption residing in the same housing unit;” whereas household income consists of “all people who occupy a housing unit regardless of relationship...a household may consist of one person living alone or multiple unrelated individuals or families living together” (United States Census Bureau, 2016). Median income for households in central Appalachia was \$33,956 according to the 2010 census, which is far less than the average family income. The difference in median income for households and families in the region is due to the aforementioned distinction between the two per census data. A household may have only one member, while a family has two or more.

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<sup>1</sup> Federal poverty guidelines for 2016 are as follows: For a family of four: \$24,300.00 or less; for a family of two: \$16,020.00 or less; and for a family of one: \$11,880.00 (U. S. Department of Health and Human Services, 2016).



It is important to point out that living in poverty does not seal one's fate for limited opportunities for improvement. Edin and Lein (1997) studied 379 single mothers living in extreme poverty and found these families were resourceful and resilient in identifying ways to improve circumstances. Even though much of the professional literature presents a negative view of Appalachian culture, there are many positive conclusions that imply resourcefulness and resilience. Women "are the backbone of each Appalachian family" and do not shy away from hard work and responsibility (Bhatraju, 2013, p. 111). As Stephenson (2013) found in talking with graduates of NOSW, women from the region are competent and fully capable of learning but may not be afforded a chance to do something to improve their lot outside of the home.

Poverty also influences economical and geographical contexts of central Appalachia. Inadequate resources contribute to economical and geographical barriers that prevent older females from enrolling in college. Unemployment, underemployment, lack of affordable childcare, monetary stress, and lack of healthcare options also advance economic insecurity and may present barriers to the pursuit of higher education (Orthner et al., 2004). Rates of employment for the Appalachian region vary by year, but according to a recent survey by ARC in 2014, 760,935 individuals were unemployed; 245,653 of those individuals were in the central sub-region.

Options for self-improvement are lacking for individuals without a stable source of income, so it seems appropriate that the vision of the NOSW allows participants to attend free-of-charge. Through grants, scholarships, and private funds, attendees participate in a program that helps provide training and other opportunities for the future. Due to economic reasons that have been discussed in this section, program attendance would not be an option for most applicants if cost was a factor in deciding to attend.

For individuals who experience chronic poverty as a risk factor, having access to resources may mitigate some of the negative effects of stress, which could increase overall life satisfaction. Low-income families are resourceful, capable of achieving goals, and able to meet basic needs; therefore, one needs to understand “sources of strength and resilience in these families, not just problems they face” (Orthner et al., 2004, p. 159). While economic insecurity may easily be viewed as a risk factor, it could be a protective factor for other families. How the family or individual judges their situation depends on how they view overall life satisfaction. Wagnild’s work on resilience used a different measure for life satisfaction, so this study expects to make a unique contribution to the professional literature on the Satisfaction with Life Scale as a complement to the Resilience Scale.

**Domestic violence.** In addition to strong influences rooted in family and cultural expectations, economical and geographical contexts come into play when looking at intimate partner violence in central Appalachia. Geographical isolation, economic distress, limited childcare options, and lack of dependable transportation, together are challenging enough for women in the area, but these issues are exacerbated for women from the region who experience domestic violence. Living far away from counseling and other mental health services, being unable to afford legal counsel, and having limited options for alternative shelter, if any, are just a few of the issues compounded for women who live with violence daily in a rural area.

Another issue that could exacerbate concerns with domestic violence in rural areas is that local extended family may simultaneously be a protective factor and a hindrance. A disadvantage of close knit communities where families are neighbors is the colloquial “sweep it under the rug” expression commonly used in rural Appalachia. The police officer who responds if a call is even made could be a relative of the abuser, and neighbors listen to police scanners in

rural communities and often recognize addresses (Adler, 1996). A woman living in a domestic violence situation in a rural area understands the likelihood her abuser and their respective families are friends with medical and emergency personnel, and combined with “a general lack of anonymity common to small communities...safeguards for confidentiality and responder objectivity is eliminated” (Teaster, Roberto, & Dugar, 2006, p. 637). As is true throughout the country, domestic violence in Appalachia is not always physical; it may simply be about the establishment of control. For example, in a study on intimate partner violence (IPV) with older women in eastern Kentucky, one participant stated that her husband “kept her isolated and burned all of her books as a means of control” (Teaster, Roberto, & Dugar, 2006, p. 641). Although women in that particular study were married, it is important to note that domestic violence occurs in non-marital relationships as well. In a study funded by the University of Kentucky Center for Poverty Research, markers of intimate partner violence among unmarried women were statistically higher than those for married women (Heath, van de Venne, & Martinez, 2008).

**Economical and geographical contexts.** The influence of culture is present in any economic, social, and geographical context, but Owens (2000) suggested that in order to describe Appalachia, “one must first decide if geography or economics is the principal point of reference” (p. 178). No matter which is chosen for the contextual point of reference, geography and economy present challenges that are unique to central Appalachia. Poverty is prevalent among families in the region, and women are often the main sources of income within a family. Cultural norms in rural Appalachia such as strong family ties and sense of place are also generational, which contribute to individuals’ attachment to the region and being less open to change (Baldwin, 1996). Some of the economic stressors in the area include, but are not limited

to, the repeated rise and fall of underground and surface mining and the declines in tobacco farming, and manufacturing jobs (Caudill, 2001; Dunaway, 2008). More recently, however, occupations in the area have been centered around other natural resources, including a growth in tourist-related attractions such as fishing, all-terrain vehicle (ATV) trails, whitewater rafting, artisan craft fairs, and revitalization of small towns (Israel O'Quinn, personal communication, September 1, 2016). More women are also attending college and learning specialized skills in order to take on employment outside of the home (McGuire, 2010). Men and women alike who have been displaced due to job loss now have more opportunities for professional development and support services than previous generations. The opportunities are present, but one factor remains problematic for residents in central Appalachia: very little can be done about the isolation that results from living in the region.

Geographical isolation contributes to economic distress in that central Appalachia is largely rural with more than 80% of the counties in the region being nonmetropolitan (Mather, 2004; Pollard & Jacobsen, 2011). The area is also mountainous with an abundance of rugged terrain. The rough topography delayed needed road construction for years (Owens, 2000). "In Dickenson County, Virginia alone, there is no major highway and no flat space to build one [road]...I know people who live there who drive over two hours to work one way, and with recent changes to surface mining mandates, it is not likely a major highway will ever be built in that part of the state even though it is needed" (Israel O'Quinn, personal communication, September 1, 2016).

Dickenson County provides an example of both the economic distress and geographical isolation that is experienced in parts of central Appalachia. The county is one of several identified as economically distressed in southwest Virginia, having been impacted multiple times

by closures of coal mines and related manufacturing facilities, in addition to family migration to other areas with improved economic opportunities. The county's mountainous terrain makes roads virtually impassable for days and even weeks in the winter unless there is access to a four-wheel drive vehicle. The last amount of "flat acreage" in the county was used to build a much-needed consolidated middle and high school (Israel O'Quinn, personal communication, September 1, 2016). ARC finds that the lack of infrastructure, such as that evidenced in Dickenson County and many other locales, contributes to the ongoing economic hardship impacting the region for decades. According to Brown and Schnafft (2011) "where one lives affects one's life chances as well as personal identity" (p. 13), so promoting education as a means of bettering one's circumstances is an ideal suggestion for ending the cycle of poverty and breaking through the vicious cycle of economic distress that accompanies life for so many in central Appalachia despite geographic isolation. In addition to improved educational opportunities, another way that Dickenson County and other locales are fighting back against economic distress is through the utilization of natural resources and development of small businesses. Rural economies throughout central Appalachia are finding ways to flourish through a variety of sustainable development initiatives.

**Rural economies and sustainable development initiatives.** One may ask why so many women choose to stay in an area where they encounter geographical isolation and economic struggles on a regular basis. For most people from this area, relocating is not an option. For many, moving would mean spending already limited resources, and for others it is not feasible to consider living far away from immediate family members who provide social support and valuable help with transportation and childcare. Even though the area has been deeply impacted by the loss of well-paying jobs with benefits in the mining of natural resources, positive changes

the last few years provide hope for the region. Rural community colleges, workforce development offices, local United Way programs, and other grassroots initiatives have revitalized multiple locations in central Appalachia (Israel O'Quinn, personal communication, September 1, 2016). By drawing on other natural resources in the area such as beautiful forests, rivers, lakes and the refurbishment of small towns, the area has capitalized on tourism to create jobs and boost the rural economy. Other development initiatives have also taken root, leading to broader job creation and sustainability.

When it comes to sustainable development, having insight into struggles unique to the area inform why initiatives must be well-planned and manageable. Developments that are merely a band aid without the provision of a lasting solution will not stand the test of time. Through her work in rural communities, Carter (1999) found rural economies, based primarily on extraction industries and agriculture, are the last to benefit from economic prosperity and the first to feel negative effects of economic decline. That reality from almost two decades ago remains somewhat accurate today; current unemployment rates and pervasive poverty highlight the negative effects of economic disparities that are present, even though they are declining (Pollard & Jacobsen, 2016).

Asset-based economic development (ABED) is a term that is closely tied to central Appalachia. The Appalachian Regional Commission (2004) defines ABED as “a strategy that builds on existing resources - natural, cultural, and structural - to create valued products and services that can be sustained for local benefit” (p. 3). Asset-based development draws upon positive traits of an identified area, and there are many such characteristics in central Appalachia. The loss of coal mining is a sensitive subject in the region, but with the prevalence of other desirable possibilities, the loss of the mining industry does not have to result in an economic

dead end for people and jobs in the area. The strong relational ties Appalachians feel toward their families and communities can be used for the greater good in that ABED requires “vision for the future built by people with an understanding of their past and present” (p. 4). Strategies for sustainable development require long-term investment, including education, which aligns with President Kennedy’s original goal for improving the lives of Appalachians.

“No other region has the landscapes, the mountain music, craft traditions and industrial heritage of Appalachia...the hospitality, work ethic and can-do attitude of its residents provide a positive force for the region” (Appalachian Regional Commission, 2004, p. 4). Current residents will benefit the most from sustainable development initiatives, which are vital to prevent mass migrations of people out of the region due to job losses, much like what occurred in the 1960s. In addition to tourists wanting to visit the region, these initiatives will attract new residents and new businesses. One way to appeal to visitors, potential new residents, and businesses is through revitalization of Main Streets. Established in 1985 and funded by the Commonwealth of Virginia Department of Housing and Community Development, the Virginia Main Street initiative has the goal of revitalizing small towns, attracting new businesses, and creating new jobs. Since 1985, this initiative has resulted in 37 communities being revitalized; 3365 new businesses established; and 11,908 new jobs created (Sarafin & Widener, 2015). One would not have to drive very far in Central Appalachia without seeing downtown revitalization efforts in several areas. Morgantown, West Virginia won the highly prized “Great American Main Street” Award in 1998 (Appalachian Regional Commission, 2004, p. 17). Other towns in central Appalachia completing revitalization efforts and reaping the fruits of their labor include Marion, Virginia; Abingdon, Virginia; Bristol, Virginia/Tennessee; Pikeville, Kentucky; St. Paul, Virginia; Jonesborough, Tennessee; and Dillsboro, North Carolina (Figure 1).

The revitalization of downtown areas “promote unique retail and dining experiences, rehabilitated use of space, and safe environments for residents and visitors” (Appalachian Regional Commission, 2004, p. 17). “If you attempt to eat lunch at a café in downtown Marion [Virginia] on a Saturday afternoon, every place is filled to capacity with a wait list...all of downtown is full except maybe one store front” (Israel O’Quinn, personal communication, September 1, 2016). This is an astounding improvement as just two decades ago Marion’s downtown was a desolate place known for dilapidated, vacant buildings with no place to eat or shop. The Main Street initiative’s success in Marion alone indicates that a downtown area full of businesses and people provides jobs to locals and brings a sustainable, long-lasting investment to an area in need.



*Figure 1.* Photo announcement marking completion of a Virginia Main Street project in Abingdon, Virginia. Reprinted with permission.

Nonprofit agencies in central Appalachia are another valuable resource for contributions to sustainable development initiatives. Compion, Ofem, Ferrier, Borgatti, Cook-Craig, Jensen,



and Nah (2015) studied economic development organizations (EDO's) in eastern Kentucky and identified a different set of initiatives for sustainability: job creation, policy research, investment and loans, skills training, and building infrastructure. Many counties in eastern Kentucky meet the criteria to be considered distressed under guidelines established by ARC, so having insight into what makes EDOs effective is critical to long-term sustainability. Collaboration was identified as key among approximately 200 EDOs in eastern Kentucky dedicated to fostering local economic development. As with initiatives mentioned in other areas, the EDOs in this study created jobs and relied on grant funds to provide the most vital services: "job retention, job creation, and job and business recruitment" (Compion et al., 2015, p. 124).

The most recent sustainability initiatives came from the Obama administration on August 24, 2016. The Partnerships for Opportunity in Workforce and Economic Relations (POWER) Initiative was released in the form of grants totaling \$38.8 million for 29 economic and workforce development enterprises in 142 coal-impacted counties, including more than half of the designated counties in central Appalachia (Appalachian Regional Commission, 2016). The grants will allow enhanced job training, cultivate economic diversity by building on existing resources, provide opportunities for reinvestment, and attract new sources of investment.

All sustainability initiatives must take into consideration what is important and meaningful to those living in the area. Even the best of intentions will go awry if the cultural and social needs of communities and the people are not considered (Nation, 2008). The Appalachian region has always managed to survive, and perhaps the people demonstrate resilience because they are so used to surviving hardship. "A place is defined by its people far more than by its geography" is an appropriate way to describe the way sustainable development initiatives are growing in central Appalachia (Daniels, 2014, p. 136). People and place are the focus and

improved economic conditions are the outcome. Each of these initiatives started as a single idea: a plan for how lives may somehow benefit in a healthy, productive way. The NOSW utilized the same idea and continues to enrich and influence lives in the region as a long-term solution to the lack of training and education women need.

### **Theoretical Underpinnings**

#### **Predictors of Resilience**

The overarching goal of this study is to identify factors that predict overall resilience for women who attend the NOSW. While the benefits of attendance will vary per individual, the choice to enroll in the program indicates a desire for improved life circumstances. Turning points in life such as educational success, employment and finding a mentor have contributed to increased resilience in several studies (Pollock, 2002; Notter, MacTavish, & Shamah, 2008; Pollock, 2002; Werner & Smith, 1992). An increase in individual resilience may be further evidenced by improved life satisfaction. Wagnild and Young's (1993) preliminary research on resilience in older women included life satisfaction. Scores on the Satisfaction with Life Scale (SWLS) in this study are examined as another possible factor related to individual resilience.

**Protective factors.** A key requirement of resilience is the presence of protective factors. Protective factors are not static; therefore, one that is protective for an individual or group may not be for another (Johnson & Weichelt, 2004). In general, they may be viewed as personality features such as openness to experience, adaptability, and competence; family components such as positive interactions with parents; and external support systems such as members of the community, supportive school experience with teachers and coaches, and faith communities (Rutter, 1990; Dorfman, Mendez, & Osterhaus, 2009). However, development of resilience cannot begin without the presence of risk. The professional literature has identified risk and

adversity as part of daily life for most women living in central Appalachia, and “acknowledging adversity gives people capacity to change their lives” (Donna Mertens, personal communication, June 17, 2015). Risk factors would include low socioeconomic status, negative messages received from family about higher education, parents’ level of educational attainment, food insecurity, and lack of supportive relationships inside and outside of the home (Maggard, 1994; Wallace & Diekroger, 2000; Notter, MacTavish, & Shamah, 2008). Risk factors are not mediated without the presence of some healthy protective factors. Speaking theoretically for a woman in this study, a risk factor may be lack of supportive relationships in her home, and a protective factor could be the supportive relationship she has with the community librarian who encourages her to apply to the NOSW.

**Social, family, and community support systems.** What constitutes supportive family is highly subjective, but one question on the participant survey asks the respondent to indicate the number of family members who support her educational and career goals. Having a family support system is a protective factor identified in resilience research (Werner & Smith, 1992; Notter, MacTavish, & Shamah, 2008; Dorfman, Mendez, & Osterhaus, 2009; Cohen, Ferguson, Harms, Pooley, & Tomlinson, 2011); protective factors help moderate risk and other negative effects that an individual may experience. For rural communities in Appalachia, the family system also has a significant role in the provision of resources and support with heavy influence on decisions regarding educational attainment (Brown et al., 2009).

Much like the construct of resilience, social support does not have a conclusive definition. Cohen (2004) describes it as the provision of resources from a social network that helps an individual cope with stress. Kurian (2013) suggests social support is broader, with available help being “emotional, financial, or informational” (p. 159). Boerner and Jopp’s

(2010) description of social support as a “protective resource” aligns with the purpose of this study (p. 135). Supportive resources for women are limited in rural areas so having a support network of family and friends who are willing to help may alleviate stress. With lack of reliable childcare and transportation being primary challenges, one form of social support may be having a dependable person with whom to leave children while attending school or maintaining employment. This type of support may also look like provision of caregiving assistance or access to someone with a reliable vehicle who is willing to assist with transportation. Social support as a protective factor serves as a mediator in times of stress and adversity. Various offerings of support reduce the impact of stress due to risk factors by either “providing a solution...or providing a distraction” (Cohen, 2004, p. 678). As found in Werner and Smith’s (1992) longitudinal studies on resilience, family support may be a risk factor in some settings, especially where poverty, lack of formal education, and lack of resources prevail. However, Ungar (2008) upholds family support as a critical component to the resilience process.

Community support, or the presence of external support systems, is also an essential part of the resilience process. In a study of family caregivers in a rural area in Australia, participants indicated the feeling of community support, including “interaction with others in a similar situation,” was an essential component to their reports on resilience (Cohen et al., 2011, p. 111). This finding is consistent with those from the Kauai Longitudinal Studies in that protective factors for children in the community contributed to higher resilience in adulthood (Werner, 2005). However, it is often difficult for older persons to maintain support networks and social relationships for a variety of reasons, and the difficulty is compounded by geographical isolation. “Rural populations are older than their urban counterparts...friends and colleagues will die or move closer to adult children...which puts longstanding relationships at risk” (Brown & Schafft,

2011, p. 111). Thus, the importance of community support becomes even more essential for rural areas, including central Appalachia. For example, in Washington County, Virginia, the main library in the town of Abingdon took initiative over a decade ago to open branch libraries in several smaller communities throughout the county. Hayter's Gap is one such library that opened in a wing of this writer's elementary school, which closed in 1991 due to declining attendance and votes to merge several smaller schools. Evidence of social networking and community support is found throughout the building, which now also houses a volunteer rescue squad, a Head Start program, a Neighborhood Watch program, and a community center. The gymnasium frequently hosts family reunions, church meetings, fellowship events such as gospel singings and Halloween parties; and may be rented by individuals for other community use. Community initiatives such as these present a productive use of empty space with the goal of providing support for those who still live there.

The context of community has potential to influence educational attainment as found in a study by Brown et al., (2009): "Completion of educational milestones requires considerable resources, persistence, and social support, and these must be provided on a regular basis" (p. 803). In addition to community and family support, social support as a protective factor is critical to adaptation. For women from rural areas, including central Appalachia, having social support could be a moderator of risks that accompany life in a geographically isolated area. The participant survey utilized in this study asks how many close friends from the community, church group or school are supportive of the individual's educational and career goals. The combination of family and community identifies a network of support for the individual. Many of these women are at a time in their lives when facing "triple jeopardy: older age, rural, and female" (Dorfman, Mendez, & Osterhaus, 2009, p. 305) and a social network can provide

essential mediation for stressful life situations that are compounded by geographical isolation and cultural stereotypes.

For those living in rural areas, resilience is viewed as an “intangible resource...that includes social support networks” (Wuthnow, 2014, p. 41). Family members may be included in the network as one study identified that women benefit “as much or more than men from relationships with friends and relatives” (House, Umberson, & Landis, 1988, p. 300). As previously identified in the literature, needs that are unique to women from geographically isolated areas include access to transportation and access to childcare. When women have systems of support on which they can rely, barriers to personal and professional development are reduced. In a pilot study of 39 women from a rural area, Hognas (2012) identified “childcare, transportation, and small favors” as the most common exchanges among females in the community (p. 344). These “networks of survival” provide support for identified needs in rural communities (Hognas, 2012, p. 334). This study mirrors the findings of Edin and Lein’s (1997) work, which found dependence on others in a support network included transportation, childcare, loans, and sharing food stamps. Childcare and transportation are necessities, and evidence is conclusive that having access to a support network helps meet the needs of women who have limited options. Having a support network diminishes the negative effects of risk factors, and will aid in fostering resilience for low-income women. The constructs of resilience and social support are examined in more detail in the proceeding sections.

**Resilience.** Many descriptions of resilience are present in the professional literature. Rutter (1990) describes resilience as “individual variations in response to risk factors” (p. 183). Ungar (personal communication, June 17, 2015) describes resilience as a function of strengths and struggles. Wagnild and Young (1993) define resilience as “a personality characteristic that

moderates negative effects of stress and promotes adaptation” (p. 165). Mertens describes resilience as the ability to recover, perform, and transform in the face of adversity (personal communication, June 17, 2015). This view of resilience includes the viability of cultural, social, familial, and geographical systems - or influences - deeply ingrained in Appalachian culture. Although definitions vary, it appears there is some consistency in seeing resilience as a process instead of something that is fixed. For this study, resilience is viewed as a process instead of a fixed personality trait because resilience may be possible at any point in the lifespan. Rutter (1993) suggests “there is a need for additional work on at-risk individuals’ achievement of positive outcomes later in life” (p. 626). Also, due to an abundance of resilience research focusing on children, there is “value in research on resilience at different points in human development” (Luthar, Cicchetti, & Becker, 2000, p. 555).

Landmark studies on resilience among children in Hawaii provide valuable insight into how resilience can manifest and lead to improved futures for children who effectively cope with adversity (Werner, Bierman, & French, 1971; Werner & Smith, 1977). Longitudinal studies with individuals on the island of Kauai were initiated when the subjects were children and followed them into adulthood. The researchers found that resilient adults had started goal-setting in adolescence and teenage years, including plans for career, self-development, and other self-fulfilling activities; personal competence and determination were most effective in dealing with stressful life events (Werner & Smith, 2001). The studies also identified the helpful nature of protective factors, phenomena that mitigate the impact of adverse life circumstances. One of the protective factors identified in their study is a social network, or system of support in times of growth as well as adversity. The presence of several protective factors, such as support outside of the family system, indicated higher resilience as adults (Werner, 1992).

Resilience depends upon more than individual attributes. The presence and impact of protective factors aids in understanding the construct as a process instead of a fixed trait or one-time experience. Ungar's (2008) definition of resilience highlights the importance of acknowledging all protective factors that surround the individual. This is consistent with examining resilience for individuals in the context of rural society. Although this study will not clarify the precise impact of community and family support on resilience, outcomes will indicate if a relationship exists between presence of a support network and overall resilience.

Resilience in adults is a relatively new topic and studies on rural resilience are even more limited. Additional studies merit attention when examining what drives and motivates women in central Appalachia to pursue higher education. The next chapter on research design and methodology describes how the current project will examine contributors to resilience. The participant surveys will ideally provide insight into how protective factors (or the lack thereof) predict the decision to pursue higher education.

**Satisfaction with Life.** Pavot and Diener (1993) define life satisfaction as “a conscious cognitive judgment of one’s life in which the criteria for judgment are up to the person” (p. 164). Although having a stable income and secure housing are basic needs essential to daily living, these are also “positive elements that transcend economic prosperity” (Diener, Suh, Lucas, & Smith, 1999, p. 276), and quality of life is not defined solely by social indicators (Diener & Suh, 1997). Inferences may be drawn from the data in this study regarding correlations between resilience and satisfaction with life, but it is important to note that satisfaction with life is subjective.

In a related study of young Latina mothers, life satisfaction was examined as an indicator of adjustment following migration to the United States. The mothers who experienced



challenges with discrimination in the community and had problems accessing necessary resources reported lower levels of life satisfaction (Raffafelli, Tran, Wiley, Galarza-Heras, & Lazarevic, 2012). Essentially, the higher levels of risk correlated to lower levels of life satisfaction. Another study on life satisfaction identified emotional support and presence of social contacts as buffers for negative impacts of stress (Ambriz, Izal, & Montorio, 2012). The study also found that the same variables contributed to resilience, and recommended “promoting them from an early age to very advanced old age...to strengthen personality and protect from adversity” (p. 844).

The ability to adapt to adverse circumstances, which relates to resilience, will also influence overall life satisfaction. Song, Kong, and Jin (2013) studied mediating effects between social support and life satisfaction for 201 females and 141 males. Outcomes indicated social support is positively correlated with life satisfaction (p. 1164). Although the type of support may be subjective to the individual, Pavot and Diener (2008) suggest the perception of support could be as influential as actual presence.

### **Relevance of Theoretical Underpinnings**

Theoretical underpinnings provide a lens through which this study can be reviewed and understood. Having insight into the process of resilience and why it is the chosen framework is critical prior to considering the section on methodology because participant competence is assumed throughout. The writer assumes resilience is a process for the women who attend the NOSW, and the presence of protective factors identified in the participant survey may help identify predictors of resilience. Many studies on various protective factors as contributors to resilience in different contexts are found in professional literature and each provide a unique perspective on outcomes (Buikstra, Ross, King, Baker, Hegney, McLachlan, & Rogers-Clark,

2010; Distelberg & Taylor, 2015; Dorfman, Mendez, & Osterhaus, 2009; Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003; Notter, MacTavish, & Shamah, 2008; Masten, Garmeiz, Tellegen, Pellegrini, Larkin, & Larsen, 1988; Raffaelli et al., 2012; Taylor, 2010; Werner, 2005; Werner & Smith, 1992; & Wuthnow, 2014). This study will provide an asset-based contribution to the professional literature on women from central Appalachia, which is a shift in research trends that generally focus on deficits that have historically overwhelmed the area. Another unique contribution of this study is the examination of resilience for women who live in geographically isolated areas. Studies on resilience in the context of rural areas are also limited.

As indicated in the professional literature, many women from the central Appalachian region face challenges in their homes that may seem insurmountable – poverty, lack of childcare, lack of transportation, and employment issues. Combined with economic difficulties, gender biases, and geographical isolation, one could easily conclude that women from the area have minimal options for changing their circumstances. New sustainable development initiatives, pioneering efforts of economic development organizations, and workforce training through rural colleges and universities are just a few examples of the new possibilities for a more hopeful future in the area. Even with the massive loss of jobs and benefits resulting from mine closures, hope is not lost because so many local entities are taking a personal interest and investing in the region. Some of these entities include United Way organizations, local colleges and universities, and area nonprofits or EDOs. Central Appalachia is on the edge of an interesting time of rebranding a new identity because of two of the very same contextual factors that have been limiting in the past: Culture and geography.

What makes the NOSW a viable option and beacon of hope is the fact it is truly a grassroots organization founded by an individual who embodies the heart and soul of rural

Appalachia. While the federally-funded ARC has made tremendous strides in improving the infrastructure and economic disparities in the region from a federal standpoint, an entirely different experience is possible when someone from the local area takes a vested interest in the lives and wellbeing of women from the same context. The significance has become even more profound as Mrs. Stephenson has continued the endeavor for 30 years. Graduates are surveyed every two years, and data from the 2010 survey found that 87% of respondents said, “their personal circumstances had improved since attending the NOSW” (Stephenson, 2013, p. 86). Survey responses further indicated 89% were registered to vote and 65% of graduates were volunteering in their respective communities. The capacity to volunteer and give back to others is carrying on the legacy of Mrs. Stephenson. Financial circumstances had improved for 73%, and 80% had completed either a master’s, bachelor’s, or associate’s degree and/or a certification program (Stephenson, 2013).

The history of Appalachia is fraught with poverty exacerbated by geographic and economic isolation, lack of employment options outside of coal mining and related industries, and rampant migration of families in search of improved circumstances. However, the tenacity of the Appalachian spirit prevails despite hardship. Women from the central region face challenges that may seem insurmountable, but given the opportunity, they are unstoppable when it comes to providing for their families. The various initiatives created to address problems in the area provide valuable options for women who have limited choices. For participants in this study, the NOSW is one program that consistently meets the woman where she is and helps her fine-tune skills and abilities through job trainings, self-assessments, classes on self-esteem, and provision of necessary clothing and healthcare. Mrs. Stephenson’s vision has been changing the

lives of women from central Appalachia for almost 30 years and the current study provides insight into the lives of women who graduate from the program.

## CHAPTER THREE: METHODOLOGY

This chapter presents a detailed account of research methodologies that were applied in this study. Descriptions of participants, research design, and methods for data collection and analysis are detailed in this chapter. An overview of selected measures is also included.

### Method

#### Participants

The subject population for this study was limited to females who are considered nontraditional students living in rural central Appalachia. For this study, nontraditional female students have either a high school diploma or General Education Diploma (GED) but did not pursue higher education immediately following completion of secondary education or a GED program. The subject population was further limited to women who have either attended or are currently attending the New Opportunity School for Women, a nonprofit organization based in rural Appalachia that serves as an outlet for such individuals to pursue higher education. Typical program enrollees are between the ages of 30 to 55 and are considered low income. Exclusion criteria included any female who enrolled in a NOSW program but failed to complete the session because contact information was not accessible. Each participant met guidelines for enrollment into the NOSW (see Appendix H). The desired number of participants for this study was ( $n = 80$ ) so that linear regression analyses could be run on continuous variables in the study.

#### Sampling Plan

Convenience sampling was the means for recruiting participants. Convenience sampling is frequently used in quantitative studies and is defined as “a section of a population that is convenient and accessible to the researcher” (Houser, 2015, p. 180). Creswell (2012) provides another definition: “In convenience sampling the researcher selects participants because they are

willing and available to be studied” (p. 145). The Foundation Board for NOSW and program directors provided access to graduates and current enrollees for convenience sampling in this study.

### **Measures**

This writer and lead faculty researcher developed the participant survey. The purpose of the survey was to have a measure for accessing raw personal data to provide a description of the participants. Descriptive statistics are useful for characterizing the sample on which the study is completed but must not be used to make inferences to the larger population (Houser, 2015). The data gathered from the survey are quantitative, such as number of dependents in the participant’s care, yearly income, age, and number of miles between their home and preferred location of NOSW. Fourteen quantitative questions and two open-ended questions make up the survey (see Appendix D). The participant survey and measures relate to the theoretical framework of this study by examining how a combination of variables predict higher markers of resilience. The combination of variables includes protective factors identified in the participant survey. The protective factors were subject to interpretation as meaning could vary among participants.

**The Resilience Scale.** The Resilience Scale was developed in response to a lack of research studying resilience among adults. The purpose of the scale is to “identify the degree of individual resilience, considered a positive personality characteristic that enhances individual adaptation” (Wagnild & Young, 1993, p. 167). Wagnild and Young (1990) developed the scale with a sample of 24 older women, and normed the measure through five studies where the mean sample size was 62.6 with females with a mean age of 48 years, which aligns with the participant population for this study. The Resilience Scale (see Appendices E & F) uses a seven-point Likert scale format for 25 questions with “1” indicating strong disagreement and “7” indicating

strong agreement. Through the development and psychometric evaluation of the measure, it was discovered that resilient older females also had greater life satisfaction (Wagnild & Young, 1990). The Resilience Scale has been used in studies where the number of participants has been as small as 20 and as large as 810.

An investigation of 12 studies that used the Resilience Scale led to the conclusion that construct validity is strong, and it has been used effectively among populations with varying ages, educational achievement, and socioeconomic status (Wagnild, 2009). The studies also indicate that validity of the scale was supported by “statistically significant associations with self-esteem, life satisfaction, depression, and perceived stress” (Wagnild, 2009, p. 106). Studies that prove strong reliability and validity of the measure have been completed on sample populations that are predominantly female, which is relevant to this study. Cronbach’s alpha coefficients vary from .72 to .94 supporting the internal consistency of the measure (Wagnild, 2009).

**The Satisfaction with Life Scale.** Diener and colleagues (1985) created the Satisfaction with Life Scale (see Appendix G). The scale has been used with various age groups, and “is shown to be a valid and reliable measure of life satisfaction” (Pavot, Diener, Colvin, & Sandvik, 1991, p. 149). It utilizes a Likert scale for responding to five statements where a rating of “7” indicates strong agreement and a rating of “1” indicates strong disagreement (Diener et al., 1985). The scale was originally created with 10 items but was reduced to five to “eliminate redundancies of wording and with minimal cost in terms of alpha reliability” (Pavot & Diener, 1999, p.103).

Normed on a reading level for sixth through tenth grades, the measure takes a minimal amount of time to finish, and may be completed with other assessments (Pavot & Diener, 1993).

Normative data is available on the SWLS for populations similar to this study, including older adults, abused women, college students, and persons with physical disabilities with sample sizes being as low as 29 and as high as 470 participants (Pavot & Diener, 1993). Validation studies completed by Diener and colleagues indicated the SWLS has a Cronbach's alpha coefficient of .79 to .89 and good test-retest reliability (Pavot & Diener, 1993; Pavot & Diener, 2008). Other studies completed to further investigate the validity and reliability of the scale indicated the brief nature of the measure had higher predictive validity than longer assessments, and that a "certain degree of stability underlies daily changes with life satisfaction" (Pavot et al., 1991, p. 160). The two studies were completed on samples of college students ( $N = 136$ ) and older adults ranging from ages 53-92 ( $N = 39$ ). An abundance of research conducted since the last review in 1993 has further indicated psychometric stability for the measure (Pavot & Diener, 2008).

A limitation of the SWLS is the impact of mood state when completing the measure because self-report instruments may be easily distorted. "Events or conditions that make circumstances better or worse will influence life satisfaction" (Pavot & Diener, 1993, p. 167), so there may be differences in reported life satisfaction for graduates and those who were currently enrolled in the program at the time of data collection. Due to the subjective nature of the measure, there is no way to control potential distortion, as only the individual can evaluate her life in terms of overall satisfaction. Chapter Four provides further insight for the consideration that a participant may be relatively satisfied with her life on some of the questions, but may have a low score overall due to one domain being more profoundly related to how she views life satisfaction in general.



## Data Collection

Three of the four NOSW schools were part of the convenience sample. The schools host annual events for alumni and current students to further foster a sense of community and ongoing support. Each of the locations has a three-week annual session except NOSW at Berea College, which has two annual sessions. Permission to conduct this study was granted by the Institutional Review Board at Texas Christian University (TCU). Meetings with current students for survey completion and administration of the study measures were arranged by the Foundation Board and program directors through coordinated school events at these locations: Berea, Kentucky; Bluefield, Virginia; and Banner Elk, North Carolina. The timeline for data collection began with mailing surveys and measures to all graduates and concluded with the writer attending an alumni event for graduates in person at Berea College.

Individuals who agreed to participate in the study during in-person events reviewed and signed an informed consent document that was approved by TCU's Institutional Review Board (see Appendix A). For participants who completed the survey and both measures in person, a code determined by the researcher was written on both scales and the survey (see Appendices D, F, and G) so that data collection was uniform when analyzing the resilience and satisfaction with life measures in comparison to individual responses on the survey. The informed consent, measures, and participant survey were mailed to graduates who do not attend annual NOSW meetings. Mailing lists were provided by the directors of the respective programs, and stamped return envelopes were included with the mailed documents.

Addresses for 539 graduates were available for mailing the participant survey, the Satisfaction with Life Scale, and the Resilience Scale. Upon receipt of returned envelopes, this writer verified that the signatures on the informed consents and the backward initials matched on

each document from the participant. A total of 140 return envelopes were received. Two were marked “deceased” and 16 were marked by the postal service as “return to sender/unable to forward.” Two others had signed informed consents but the measures were not completed. Fewer than 10 return mailings lacked the signed informed consent. Since this writer had access to mailing lists, an amendment to the original approval from TCU’s Institutional Review Board was submitted to obtain permission to contact each of these 10 participants again by mail requesting her signature on the informed consent. Permission was granted (see Appendix B) and follow up mailings were sent to nine individuals. Six additional informed consents were received as a result. Nineteen individuals completed surveys, measures, and informed consents during in-person meetings with participants. The final sample total was 109 participants ( $N = 109$ ) following testing of statistical assumptions.

### **Research Design and Data Analysis**

This study had a mixed methods and correlational design because the relationship among identified variables was examined. Correlational studies align with a participant population that is largely homogeneous (Gall, Borg, & Gall, 1996). As discussed in Chapter One, the subject population for this study meets this criterion. Quantitative designs are also the most efficient when examining the relationship among variables. Qualitative analysis provides insight into the lived experience of the participant through her own words. Houser (2015) suggests that “correlational research may be particularly relevant in education...given that there is a need to study complex human issues and understand their relationships” (p. 73). As the literature review indicates, a variety of complex issues exist for lower-income females from central Appalachia who decide to pursue higher education. The issues are quantifiable (Gall, Borg, & Gall, 1996) by using reliable and valid measures and the participant survey. Statistical analyses on

quantitative data were completed using SPSS for Windows. Data from participant surveys defined and identified relevant information, including those with access to childcare and transportation. Mean scores on The Resilience Scale and Satisfaction with Life Scale were also included in the analyses. Demographic information for the participant sample includes race/ethnicity, age, income, and miles from their respective NOSW location. Demographic information is reported in Chapter Four using the mean and standard deviation for each category.

**Quantitative data.** Identified complexities were analyzed using linear regression, which examines the relationship between a minimum of two continuous variables to predict the value of a dependent variable. When variables are identified as correlated, one variable may be used to predict another (Girden, 2001). Therefore, linear regression considers the predictive nature of the independent variables. The regression analysis included the following independent variables: presence of a support network that includes family, friends, and community services, access to transportation, access to childcare, number of family members with a college degree, and SWLS score. The dependent variable was the participant's score on the Resilience Scale. The variables were coded for the analysis in SPSS by this writer.

**Qualitative data.** A mixed methods design was utilized for this study with responses from the open-ended questions on the participant survey discussed in Chapter Five as potential implications for future research. Data from these questions were analyzed using open coding and thematic analysis to reveal the possibility of other variables that are relevant to an individual's pursuit of higher education. The qualitative data were not a major part of the design and were useful only insofar as indicators for additional study. In qualitative inquiry, the identification of themes is finding the statement(s) of meaning that "runs through all or most of the pertinent data, or one in the minority that carries heavy emotional or factual impact" (Ely,

Vinz, Downing, & Anzul, 2001, p. 206). Dominant themes from participant responses, as well as themes that are relevant and unique to the research are discussed in more detail in Chapter Four. Participants' responses to two open-ended questions were transcribed to a spreadsheet for coding purposes. According to Stringer (2013), open coding is a concerted effort to identify exactly what is shown in the data. Words that were the same or similar among participant responses were highlighted in yellow for tracking purposes. Categories were developed based on the theoretical framework of the study. Once open coding was complete, focused coding allowed this writer to identify words and phrases (Stringer, 2013) using highlighters to distinguish among categories. By coding in this manner, themes emerged from the data, and relevant quotes for each theme were also highlighted. Due to the small data set, a second reader was not utilized for analysis of qualitative data.

Themes were identified by open coding of the data. Using a yellow highlighter, this writer reviewed answers to each open-ended question separately. Use of the yellow highlighter provided a visual representation of words and phrases that were either the same or similar. Once open coding was complete, this writer completed focused coding which highlighted words and phrases based on *a priori* categories that align with the theoretical framework of the study. Using a different color highlighter for each of the categories, content was organized based on themes. For example, all answers that mentioned "myself" as a primary influence for pursuing higher education were highlighted pink; any words or phrases indicating family support were highlighted green. This form of coding provided a detailed aesthetic for viewing dominant themes in participant responses (Stringer, 2013).

### **Ethical Considerations**

As a licensed counselor, this writer approached this study with heightened ethical awareness. Even though the writer was born and raised in rural, central Appalachia, she was an “outsider” coming into the lives of the participants at a vulnerable time. Having an awareness of the potential refusal of individuals to participate, as well as respect for the structure and time constraints of the three-week sessions for each program, was essential for the integrity of this study.

Women who have either graduated or were currently in the NOSW program may not have considered individual resilience and satisfaction with life, so it was important for the writer to explain the details of the study in person to each director so that questions would be answered effectively. The writer was available by phone and email for the duration of the study to answer participant questions.

## CHAPTER FOUR: RESULTS

This chapter provides a thorough review of outcomes from statistical analyses of quantitative data and thematic analysis of answers to the open-ended questions on the participant survey. The purpose of this study was to identify factors that contribute to resilience processes in women who have a desire to improve their circumstances through higher education and training. The guiding research questions and hypotheses for this study were as follows:

How do variables identified in the literature (i.e., number of family members with a college degree, access to childcare, access to transportation, presence of a support network, and score on Satisfaction with Life Scale) predict participant levels of resilience?

Hypothesis: The combination of these variables will predict resilience at a level of statistical significance.

How does participants' life satisfaction predict levels of resilience?

Hypothesis: Measures of life satisfaction will predict participant's resilience level.

### Results

To complete the Resilience Scale, participants answered 25 questions with a Likert scale system for responding. Participants indicated their answer to each question by circling a number from 1 (strongly disagree) to 7 (strongly agree). According to Wagnild (2014), total scores indicate level of resilience in three categories: low (less than 121); medium (121-146); and high (147 and above). Possible scores on the Resilience Scale range from 25 to 175. The Satisfaction with Life Scale (SWLS) also utilizes a Likert scale selection for answering five questions on a scale of 1 (extremely dissatisfied) to 7 (extremely satisfied). Possible scores range from 5 to 35. Extreme dissatisfaction is indicated by scores that are less than 10; scores 31 or higher indicate extreme satisfaction (Pavot & Diener, 1993; 2008). Detailed findings for each research question

are discussed in this chapter as well as themes identified from participants' responses to open-ended questions. The chapter also includes descriptive statistics and demographics for the sample population.

**Demographics.** The mean age for participants was 50 years with a standard deviation of 12. The mean monthly income was \$1072 with a standard deviation of \$577. The mean number of miles that participants live from their respective NOSW location was 76 with a standard deviation of 45, and 82 participants indicated they had health insurance (89% of the sample population). Ninety-six percent of respondents indicated their race as "white" or "Caucasian" which is reflective of the census indication of racial homogeneity in rural Appalachia. Participants with dependents under the age of 18 ranged from zero (none) to seven. Participants with dependents over the age of 18 ranged from zero (none) to three. Ninety-four participants indicated their religious preference as Christian; many included a specific denomination with their response, such as Baptist or Methodist. Homogeneity of the participant sample is further evidenced by the majority identifying as Christian. Remaining participants identified themselves as Pagan, Buddhist, Mormon, or simply "spiritual."

**Descriptive statistics.** Descriptive data were analyzed using SPSS for Windows. The mean score on the Resilience Scale was 138.20 ( $SD = 19$ ). The mean for the Satisfaction with Life Scale (SWLS) was 20 ( $SD = 8$ ). Scores on the measure of resilience ranged from 74 to 169. Satisfaction with life scores ranged from 5 to 34. Descriptive statistics on selected demographics as well as predictor variables in the study are presented in Table 1.

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**Table 1.** *Descriptive Statistics*

<u>Variable</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>Minimum</u>	<u>Maximum</u>
Age	109	50.0	12.4	21	73
Dependents < 18	109	0.47	1.033	0	7
Dependents > 18	109	0.35	0.686	3	0
Resilience Score	109	138.0	18.5	74	169
SWLS Score	109	20.0	8.0	5	34
Childcare	109	1.44	0.751	0	2
Transportation	109	0.81	0.396	0	1
Support network	109	9.50	16.4	0	150
Family with degree	109	1.10	1.37	0	5

Note. Descriptive statistics from the participant sample cannot be generalized to the larger population.

**Testing of statistical assumptions.** The analysis met six of seven assumptions regarding use of linear regression. The first two assumptions of linear regression were met since the design of the study included 1) a continuous dependent variable; and 2) five continuous independent variables. The remaining five assumptions were tested through statistical analysis in SPSS. A linear relationship between the independent and dependent variables is necessary for the third statistical assumption to be met. Visual inspection of scatterplots for each independent variable revealed a linear relationship between the SWLS score and the Resilience Scale score as well as presence of support network and score on the Resilience Scale (see Figures 2 & 3). The assumption of linearity was not met for the other independent variables (i.e., access to childcare,



access to transportation, and number of family members with a college degree). The fourth assumption involved verification of independence of observations, which is analyzed using a Durbin-Watson statistic. Independence of residuals was reported at 2.36 when outliers were removed, indicating a lack of correlation among residuals.

Examination of outliers comprises the fifth assumption of linear regression. Outliers are data points that are significantly small or large with the likelihood of impacting distribution and may limit accuracy of predictions (Urdan, 2010). The fifth assumption was tested using case-wise diagnostics. Three outliers were revealed (i.e., three standard deviations above the mean score). Maintaining a high level of research ethics, this writer took extra steps to ensure the outliers were not the result of either data entry error or measurement error. The ensuing investigation revealed two of the scores were extremely low on the Resilience Scale, and the third revealed the highest amount possible on the Resilience Scale and SWLS (i.e., each item on both measures was filled with the highest point possible). This participant also wrote brief answers on the participant survey such as “all” or “none” and left some questions blank. For the two participants who had extremely low scores on the resilience measure, minimal variation existed in numbers circled on the scale.

The study did not allow for follow up with participants for verification of accuracy of these scores. Specifically, it was unknown if these three respondents were affected by difficult circumstances the day they completed the questionnaires or if these were accurate choices for each question based on their overall lived experience. Therefore, to determine the effect of these scores on the results, a second linear regression was calculated after removing these three outliers. Results differed significantly from the first analysis, therefore, these outliers were removed.

The sixth assumption indicates data must show homoscedasticity, which reveals if variance of residuals (errors) is constant across all values of independent variables (Cohen, 1988). Homoscedasticity was present in the data set for this study as assessed by visual inspection of a plot of standardized residuals compared to standardized predicted values. In other words, the errors fit around the line of regression with little variance shown. The seventh and final assumption of linear regression requires verification that residuals of the regression line are approximate in the normal distribution (Cohen, 1988). Normality was assessed by visual inspection of a normal probability plot and normal distribution of errors was evident. The sixth and seventh assumptions are closely related in that both must show residuals are close and somewhat normally distributed along the line of regression.

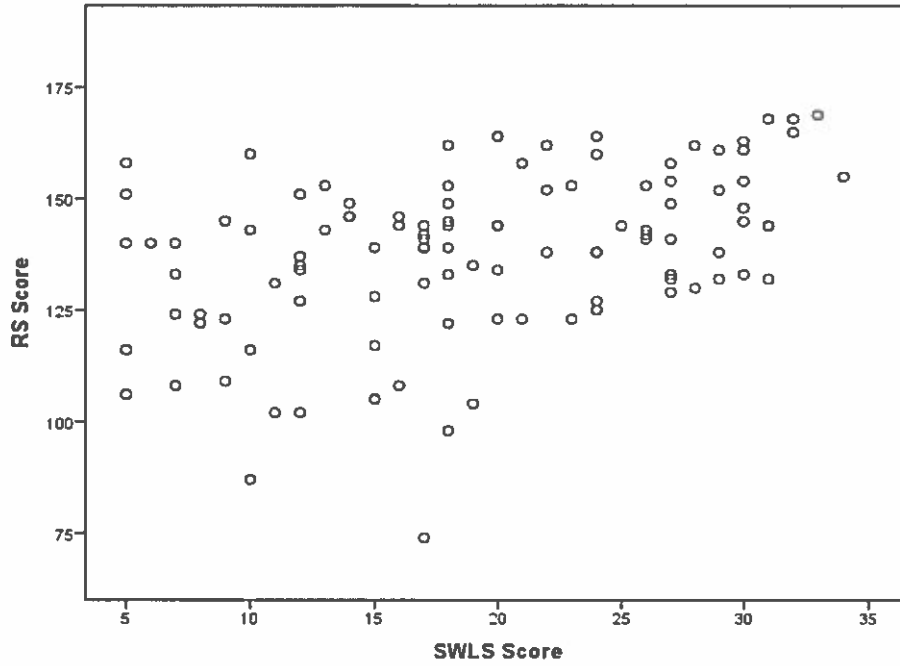


Figure 2. Scatterplot visual indication that the assumption of linearity is met for Satisfaction with Life score and Resilience Scale score.

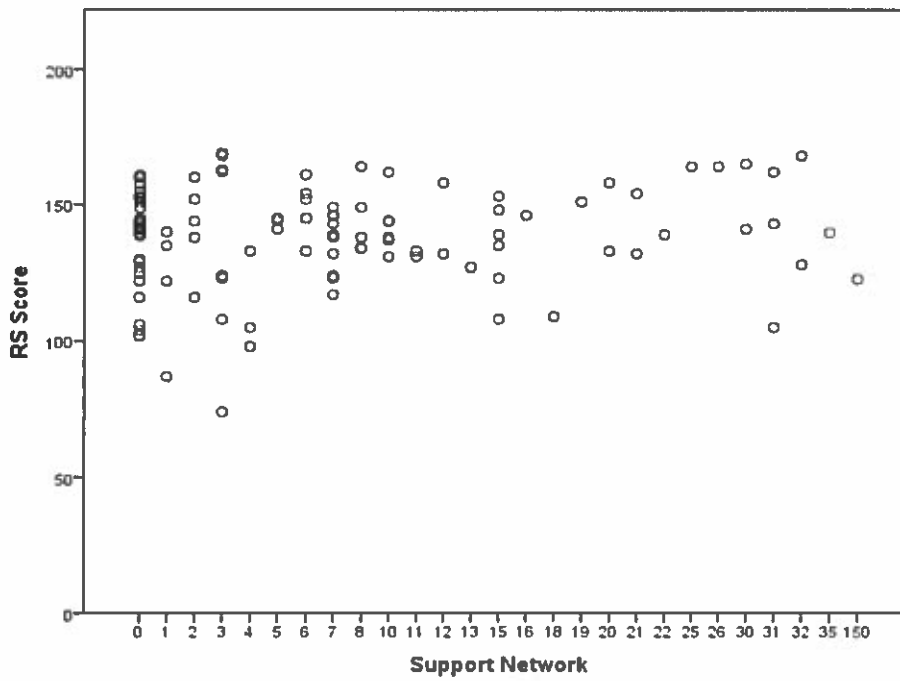


Figure 3. Scatterplot visual indication that the assumption of linearity is met for presence of a support network and Resilience Scale score.

### Results of the Regression Analysis

Completion of a linear regression analyses allowed exploration of the hypothesized relationship between resilience and identified predictor variables. The regression determined the effects of satisfaction with life, number of family members with a college degree, presence of a support network, access to transportation, and access to childcare on individual resilience. The independent variables in this study had no *a priori* foundation for order – one was not assumed to be more significant than the other, and were therefore constant. There was no multicollinearity (Houser, 2015) among independent variables. The presence of multicollinearity, or high correlation between two or more predictor variables, would have limited the ability to draw conclusions based on results of the study.

The first research question asked whether five independent variables previously cited in the literature (i.e., number of family members with a college degree, access to childcare, access to transportation, presence of a support network, and SWLS score), would predict levels of resilience in the participant sample. Based on the results of the linear regression analysis, variance of the predictor variables is reported as  $\beta = .47, t = 5.13, F(5, 100) = 5.45$ ). This group of variables accounted for 21.4% of the variation in scores of resilience with an adjusted  $R^2$  of 17.5%, which is a medium effect size according to Cohen (1988). The adjusted R is more conservative in efforts to avoid Type 1 error. Satisfaction with life contributed the most variance in the regression with  $\beta = .47, t = 5.13, p < .001$ . Access to reliable transportation contributed the next highest amount of variance with  $\beta = .15, t = -1.59, p < .001$ . The remaining independent variables (i.e., access to childcare, number of family members with a college degree, and presence of a support network) contributed little to no variance in the regression. Therefore,

the first hypothesis is accepted since a combination of the variables predicted resilience at a level of statistical significance.

The second research question asked how participants' life satisfaction predicts level of resilience. This question was answered using two different analyses. First, out of the independent variables, the variable with the largest regression coefficient with statistical significance was "satisfaction with life," as indicated by the individual's score on the Satisfaction with Life Scale. Visual inspection of a scatterplot of values demonstrated those with higher scores on the RS were likely to have a higher score on the SWLS. As previously shared, the impact of life satisfaction on individual resilience was indicated by  $\beta = .47, p < .001$ . The larger  $\beta$  for satisfaction with life indicated a significant change in level of resilience because for each approximate half point of a unit increase in life satisfaction, the individual's resilience increased one full unit. According to Girden (2001), partial regression coefficients "reflect the average amount of change predicted in Y for each unit change in the corresponding X when all other independent variables are held constant" (p. 129). The second analysis conducted was a single order correlation. A moderate correlation was found between SWLS and the Resilience Scale ( $r = .42$ ). As such, the hypothesis for the second question is accepted.

As a summary, the study was correlational by design to reveal the possibility of a relationship between scores on the Resilience Scale (Wagnild & Young, 1993) and several independent variables. The determination of correlation was analyzed by linear multiple regression in SPSS, and this test is "one of the most widely used statistical techniques in educational research" (Gall, Borg, & Call, 1996, p. 433). The linear multiple regression was a useful tool in examining for effects of a combination of variables on the individual level of resilience. Results of the regression determined the effect of the combination of variables was

statistically significant for predicting levels of resilience, as well as the indication that satisfaction with life is a predictor of resilience. The only other independent variable with a moderate prediction for resilience was access to transportation. Participants with higher levels of resilience also have higher levels of satisfaction with life. In addition to quantitative results, thematic analysis of qualitative data provided useful insight into what contributed to the participant's choice to pursue higher education. These results are discussed in further detail, with information from participant responses, in the next section.

### **Qualitative Outcomes**

For the question asking about primary reason the individual has not pursued a college degree, some highlighted similarities included “lack of funds/money;” “lack of support” or “not encouraged;” “had to work;” and “my health” or “health issues.” Some relevant but less frequent responses included “drug addiction” or “active addiction;” “don't have resources;” and “caregiving for parents.” For the second open-ended question which asked about the primary influence for obtaining higher education, variations of the same or similar responses included “myself” or “me;” “friend” or “mentor;” “my family” or “my children;” and “NOSW graduate.” Relevant but less frequent responses to this question included “needed moral support” and “interaction with other women;” “an ad in the newspaper;” and “[seeing outcomes] for other people who attended [the program].” The procedure of open coding identified the themes in participant responses and were indicated by yellow highlights in the transcription. Focused coding using variations in colors of highlighters demonstrated frequency of similar responses, such as the participant indicating self-motivation or family support as the reason for pursuing higher education. The influence of mentors and family support was a dominant theme for the second question: “In just a few sentences, what or who would you identify as the primary

influence behind your decision to attend NOSW?” Lack of financial resources and lack of support were dominant themes for the first question: “If you could identify one reason you have not pursued higher education prior to enrolling in NOSW, what would it be?” Each of the dominant themes, as well as less frequent responses, provide insight for this study, as well as implications for future research which are discussed in Chapter Five.

Outcomes for the open-ended questions contradict some results from quantitative data analysis. For example, participants clearly articulated the importance of a support network in more than half of the responses when asked about the primary influence behind pursuing higher education. Access to reliable transportation and childcare as a barrier to pursuing higher education was not a dominant category of responses for the first question. Satisfaction with life was not mentioned directly in response to either question, but several answers led to the conclusion that a dissatisfaction with existing circumstances at the time led to the decision to attend NOSW.

Lack of financial resources appeared to be the primary reason women had not attempted higher education, followed by lack of support. The primary influence for pursuing higher education was a combination of family support and self-motivation. Graduates and staff for NOSW programs were also reported as highly influential in the decision-making process regarding higher education. Identified themes are discussed based on responses to each open-ended survey question.

**Thematic analysis.** Survey Question 1: If you could identify one reason you have not pursued higher education prior to enrolling in NOSW, what would it be?

Participant 9 (P9) indicated she had “relied on my man and didn’t think it was necessary.”

P25 stated, "I didn't know support existed for women in my situation." While we do not know what was going on with her situation, it is evident she was unaware of various support systems – financial and otherwise – that may help her pursue higher education.

P51's response shed light on a new issue facing older females in the area: "Don't have resources or time...no help...my mother is 74 and Dad is 76 years old...very limited resources."

P55 and P56 shared a similar response that was reflective of the literature review. P55 said, "I was not encouraged to pursue a career," and P56 stated, "I didn't have anyone pushing me to go as a teenager."

P64's response reflected the discouraging messages some women face: "I was always told I wasn't smart enough." Although it was not a dominant theme in responses, Participant 59 simply stated "fear of failure." This presents a concern for women from the area, especially who receive negative messages about higher education.

Other categories of responses included low self-esteem, having to work full time to support children, and drug addiction. Each category of themes provide valuable insight into how future programs could be adjusted to accommodate some of the needs that exist for women from the area. For example, an issue that was not identified in the literature review is that of lack of resources and support for those caring for aging parents. With the mean age of participants at 50, it is understandable that many in this demographic are likely in the position of having to care for elderly family members. One participant indicated she "was just tired...had cared for her parents, her husband's parents, and other family members." Less frequent responses to survey questions may also assist EDO's, institutions of higher learning, and job training programs determine ways to best serve the population. The needs are clearly unique and varied, even though some dominance of themes is present.



Survey Question 2: In just a few sentences, what or who would you identify as the primary influence behind your decision to attend NOSW?

Many participants identified their support person(s) by name; the term “mentor” is used here to further protect participant confidentiality.

Several participants referenced a graduate or graduates from NOSW who spoke to groups they attended at drug courts, food stamp offices, or other social service agencies.

P28 indicated her primary influence was “a NOSW graduate who spoke at my drug court group about her experience with the program.”

P85 stated, “Drug court and my children.”

The participants who indicated self-motivation as the primary influence responded in a variety of ways.

P108 said, “Myself. I wanted to better myself and I decided all on my own to do this for me.”

P83 said, “I wanted something for me...just once in my life I wanted to be something.”

P68 specifically indicated she was influenced by her children: “My daughter was 16 and dropping out school like I’d done...my son graduated from high school and went to work in the coal mines. I figured it was more like show them what to do instead of tell them.”

P12 reflected something similar in her statement: “Myself...I want to teach my daughter she can have a respectful job and an education. Whether due to the presence of some type of social support or simply wanting to change their circumstances, women in this study are clearly motivated by their families. Family circumstances were reflected in P99’s response:

“Myself...to be the first person in my family with something other than a GED.”

Although the Resilience Scale (Wagnild, 1993; 2014) does not consider the benefits of social support, discussions on the measure and SWLS indicate that social support or social relationships are factors that contribute to both resilience and satisfaction with life. Individuals who have higher scores on both measures are likely to have close relationships and support from friends and family (Diener, 2006; Wagnild, 2014). “Acceptance and support helps one to live resiliently...close friends support and encourage us to live meaningful lives, pursue our dreams, be ourselves, and keep going when we want to quit (Wagnild, 2014, p. 164). Similarly, Diener’s (2006) work suggests happiness with social relationships is “one of the most important influences” (p. 3) on life satisfaction. Many things can influence happiness at any given time: loss of a loved one, change in marital status, children moving away from home, and changes in employment, among others. Quantitative results did not replicate findings in professional literature that point to the importance of social support as a contributor to resilience and life satisfaction, although qualitative outcomes indicate the presence of support is a contributing factor to pursuing higher education. These findings are discussed in Chapter Five.

## CHAPTER FIVE: DISCUSSION & IMPLICATIONS FOR FUTURE RESEARCH

This chapter reviews the findings of the study and discusses implications for future research. Strengths and limitations of the study are also discussed. The purpose of this study was to identify factors that contribute to resilience processes in women who have a desire to improve their circumstances through higher education and training. Due to the mixed methods design of the study, quantitative and qualitative results will be discussed interchangeably in the proceeding sections.

### **Discussion of Findings**

A combination of independent variables (i.e., access to transportation, access to childcare, number of family members with a college degree, satisfaction with life, and presence of a support network) were analyzed for statistical significance in predicting the level of resilience for individual participants. Completion of linear regression analysis indicated the variable showing the greatest significance was participant score on the Satisfaction with Life Scale. Access to reliable transportation was next with a moderate amount of variance. Variables that were not statistically significant in the regression for predicting resilience in the participant sample included number of family members with a college degree, presence of a support network, and access to childcare.

The mean score on the Resilience Scale was 138, which indicates a moderate level of resilience (Wagnild, 2014). Moderate levels of resilience indicate “possession of many characteristics of resilience... [the individual] can build on those to keep strengthening resilience (p. 226). Specifically, scores that fall between 131 and 144 demonstrate an individual is moving forward and acknowledging what is working well, but “many aspects of life are not satisfactory” (p. 226). Thus, the average score on the resilience measure is moderately correlated with the

mean score on the SWLS, which was 20. The average score for the sample studied indicates neutrality with satisfaction with life (Pavot & Diener, 1993; 2008). Scores between 20 and 24 are average for people in “economically developed nations...the majority of people are generally satisfied, but have some areas where they very much would like improvement” (Diener, 2006, p. 1). This is indicative of personal responses to the open-ended questions, as it appears that most participants are persistent with their goals and doing what needs to be done each day in their lives. Diener (2006) also suggests that for those with markers of less than 10, extreme dissatisfaction is likely present in several areas of life. One can conclude from the results that participants have room to grow in terms of resilience and life satisfaction.

### **Presence of Support**

The presence of support as a protective factor is fundamental to the process of resilience. As previously identified in the literature, support may come from family members, community members, and mentors. Various forms of support may look like help with transportation or help with childcare – or both. Quantitative results from this study did not find conclusive evidence that the presence of support predicted resilience for the participant sample. One reason for the lack of significance could be explained by the selected Resilience Scale not having a component for identifying the impact of support on resilience. Another reason could be the subjectivity of support. Finally, multiple regression is generally conducted on variables providing continuous data, but some of the variables for this study were dummy coded, which due to truncated scales, may have affected results.

Contradictory to quantitative results, the presence of support was indicated as a primary influence for pursuing higher education in responses to Question 2 on the participant survey. Since the construct of support has been identified as subjective in this study, there is no way to

know what the presence of support looked like, or the lack thereof. An interesting conclusion drawn from the responses to Question 1 indicated the lack of support played a role in the decision to not pursue higher education. Therefore, even without statistical significance indicating the presence of support as a predictor of higher levels of resilience, most participants indicated the presence of some type of support in their lives that was helpful in nature. Such support is a strong indicator of resilience (Werner & Smith, 1992; Werner, 2005).

### **Cultural Factors**

Cultural factors such as geography, economics, poverty, lack of transportation, and lack of access to childcare were identified in the literature as problematic for the central Appalachian region. Although individuals from this area are known for self-sufficiency, taking care of their families, and helping in the community; historically, lesser amounts of support have been given to those who choose to attend college. Evidenced throughout the stories of NOSW graduates was the propensity to put themselves last over family needs (Stephenson, 2009; 2013). While in many cases this was necessary, other instances of limitations were the result of gender bias.

Responses to open-ended questions provided insight that some gender bias was present in messages received about self-improvement and the pursuit of higher education. For the participants who received discouraging messages about females going to college, it was evident that such narratives did not prevent them from doing so later in life. However, this was not a pervasive throughout focused coding of the data, which could indicate progress in the cultural discourse regarding women's roles and patriarchal dominance. In addition to gender bias, access to reliable transportation and access to reliable childcare are two other cultural factors that were analyzed in this study. Access to transportation was a moderate predictor of resilience in

quantitative results as well as in responses to open-ended questions. Access to childcare was not problematic for this participant sample.

As previously stated, one must consider “whether geography or the economy is the principal point of reference” when studying Appalachia (Owens, 2000, p. 178), and this is certainly true for this study. While it seems as if participants have been able to manage rather well in terms of geography, the lack of financial resources was a dominant theme in response to the question that asked about the primary reason for not pursuing higher education. In rural areas, the lack of money translates to less resources and less options. Thus, sustainable development initiatives are critical to the ongoing development and enhancement of the area. Such initiatives translate to more options, including improved job opportunities and better pay. Financial resources are essential for women to provide for their families and take advantage of other opportunities for self-development instead of having to choose between the two.

### **Lack of Financial Resources**

Evidenced throughout open-ended responses was the aforementioned fact Appalachian women are tenacious and enterprising, leaders of the family, and “strong and tenacious in times of hardship and prosperity” (McGuire, 2010, p. 34). However, it remains that education cannot be a priority when financial resources are limited, and there is some indication that domestic violence remains a barrier to pursuing higher education. “Money” or “lack of money” was the dominant response when asked about reasons for not pursuing higher education. This is information that agencies and institutions of higher learning need in recruiting for adult education programs, job training opportunities, and other avenues of professional development. If the choice must be made between providing groceries for her children or enrolling in college courses, it is evident that women from rural Appalachia will choose their families every time.

Financial issues may exacerbate domestic violence issues. Several of the participants referenced “bad relationships” or “abusive relationships” and “abusive situations” in their responses as to why they did not pursue a college degree. While domestic violence is certainly not exclusive to central Appalachia, the reality of abuse is compounded by geographic isolation, limited resources, and limited access to support services. Further exploration and study with women from this region who have survived domestic violence and rose above their circumstances to pursue higher education would provide valuable insight into other predictors of resilience.

### **Impact of Significant Life Events**

Much like major turning points in life can contribute to increased resilience, qualitative findings from this study reveal the impact of significant life events. This was an unexpected finding. Starting over after having children at a very young age, going through a divorce, success stories from NOSW graduates, and former teachers and supervisors were smaller categories of responses to the question regarding the primary influence for pursuing higher education. The significance of life events was not an *a priori* consideration for this study, but appears very relevant to the discussion on factors that predict resilience. While some themes that emerged from this question were more dominant than others, each provides relevant information for programs like NOSW, community colleges, and EDOs. Educational institutions need to understand the variety of influences that can either serve as a protective factor or risk factor for women in this region who decide to pursue higher education.

Several women indicated supportive family (husbands, children, sisters, and parents) as primary influences, but as indicated in the literature review, families in central Appalachia can be just as unsupportive of females taking an active role outside of the home (Maggard, 1994;

Wallace & Diekroger, 2000; Brown et al., 2009). The support of family as either a protective factor or risk factor should be continually monitored by programs seeking to help women who desire a college degree, especially in situations where indicators of domestic violence – including emotional abuse – are present. Ungar (2008) stresses the importance of a systems approach in understanding resilience, and such an approach would take into consideration the impact of the individuals' support systems.

Evidence from both the literature review and the results of this study indicate that women from central Appalachia face a variety of challenges when a decision is made to pursue higher education. Also accurate is that many of these challenges exist whether the decision is made or not. For professionals who work with these individuals, it is imperative to understand the issues in addition to knowledge on how to best serve and assist in meeting their needs regarding higher education and training. For example, access to transportation demonstrated a moderate prediction of resilience in quantitative results. This finding was anticipated due to evidence in professional literature indicating lack of transportation as a barrier to steady employment and professional development (Maggard, 1994; & Orthner et al., 2004; Wallace & Diekroger, 2000). However, since research also indicates families in rural Appalachia are likely to live close together, reliable transportation is one of the shared resources among family members (Maggard, 1994; Orthner et al., 2004). Childcare was another variable that did not predict resilience, but should not be overlooked when working with women from this area. This finding could be due to the fact fewer participants indicated the need for childcare due to not having dependents under the age of 18. Additionally, childcare is another shared resource among families living in rural areas (Edin & Lein, 1997; Bhatraju, 2003; Hagnas, 2012).



In conclusion, ambiguity of constructs could be a reason why only two of the independent variables carried most of the weight in the analysis. As previously stated, concepts such as family support and satisfaction with life are highly subjective to the individual. These factors had to be dummy coded for analysis purposes. Of the *a priori* factors chosen for potential prediction of levels of resilience, the combination of satisfaction with life and access to transportation were the only ones with significance. The combination of these variables provide insight into what had the greatest impact on women in this study who chose self-improvement despite adversity. However, based on the results of quantitative data analysis, the collective use of the five independent variables in this study may not be the best representation of constructs that would measure resilience for low-income women from central Appalachia.

### **Implications for Future Research**

This year marks the thirtieth anniversary for the New Opportunity School for Women. Several challenges are present that did not exist three decades ago, and the program is faced with the challenges of adapting to better meet the needs of low-income females from the area. Some of these challenges include grandparents raising grandchildren and an increase in drug addiction. In general, the programs have discovered it is more difficult for women to leave home for three continuous weeks of education or training compared to thirty years ago (Meg Quinn, personal communication, May 30, 2016). The program at Berea College is currently taking strides to address that barrier by initiating one-week sessions in various parts of the state. Meetings such as these will provide a condensed version of the three-week program while meeting the women in a location that is convenient to their home (Lori Sliwa, personal communication, June 20, 2016). Access to reliable transportation is one factor that remains problematic for women from the area as indicated in literature, and this was a moderate predictor of resilience in results for

this study. Transportation is an essential component for any individual who desires opportunities for personal and professional development.

Another challenge found in this study is the likelihood of participants being in the position of having to take care of aging parents with limited resources, impeding their ability to attend school. With the addition of one-week sessions in various communities, it is probable that women with fewer options for childcare and parent care could still benefit from the program without having to be away from home for three weeks. Drug addiction is another issue that was mentioned by several participants. With the recent rise in nonmedical opioid abuse in central Appalachia (Keyes, Cerda, Brady, Havens, & Galea, 2014), accommodations for those with prescriptions may be cause for further consideration prior to admission (Meg Quinn, personal communication, May 30, 2016; Lori Sliwa, personal communication, June 18, 2016).

Nonmedical opioid addiction is concentrated heavily in areas that are predominantly rural, such as Kentucky and West Virginia (Keyes et al., 2014). Area drug courts are a frequent referral source for women who apply to NOSW.

Qualitative outcomes provided support for the importance of a support network. The presence of social support for participants was not statistically significant in quantitative results of this study. This finding was unexpected as professional literature has established a thorough research base on the benefits of social support in relation to resilience. Research has continually indicated women are more likely than men to rely on social support in times of struggle, but in general the “reserve capacity and...potential for change and continued growth in later life” needs to be studied in more depth (Werner, 2005, p. 14). When convenience samples are not available for future studies, partnerships between EDOs and social services agencies could initiate additional examination of contributors to resilience for females in the age range of 30-55, which

is the average age of participants attending the NOSW. The lack of statistical significance for presence of a support network was not validated by responses to open-ended questions which confirmed the support of mentors and family members was contributory to the decision to pursue higher education.

In addition to the presence of social support, the predictor variables of access to childcare and number of family members with a college degree were not statistically significant in this study. Therefore, a final implication for future research is for studies to accommodate participant input on variables that contribute to resilience.

### **Recommendations for Future Research**

A potential follow-up study utilizing the same convenience sampling procedure could be the administration of pre- and post-tests with future cohorts. The SWLS scale and the Resilience Scale could be administered to participants at the beginning and at the end of each program, at six months' post-completion, and again at 12 months' post completion for comparison purposes. A study of this nature could provide valuable insight into any fluctuations in self-report of life satisfaction depending circumstances at the beginning of the program and again one year later.

Another potential study for future research could be a between-groups comparison for participants who complete the program at different locations. Many of the issues that serve as a barrier to higher education are consistent throughout central Appalachia, but there could be factors that are unique to a particular area in which a participant lives that play a role in options for professional development. Findings from comparison studies among locations could provide valuable insight for directors and other individuals who recruit for the programs.

A study that is solely qualitative in nature may provide the most insight into factors that contribute to resilience for women from this area who pursue higher education. For example,

this study revealed a unique outcome in that a prevalent issue facing these women is the care of aging parents. With the mean age of participants at 50, it can be assumed their parents are in their 70's and older. While childcare was not a significant predictor in the quantitative findings of this study, a question asking about resources and support for those in a caregiver role may find a different result. Qualitative inquiry into the lives of central Appalachian women may provide a very different picture than that of a study that is predominantly quantitative because explanation of constructs may reduce ambiguity, as well as allow for clarification of the subjective nature of certain terms. This type of study would also allow the participant to read a transcript of their responses and provide further details if needed.

Finally, studies on adult resilience in the context of rural environments area extremely limited in professional literature. Rural resilience is a construct that is duly complex, and outcomes for resilience may look different than for those in suburban and urban areas. Since a plethora of research exists on negative impacts and deficits of rural living, additional strengths-based contributions to the literature would be a shift in how life in central Appalachia is both studied and understood. Future studies along these lines could also provide a stronger evidence base for education as a deterrent to poverty as well as looking at local impacts of sustainable development initiatives. In addition to sustainable developments mentioned in Chapter Two, several NOSW graduates have gone on to become small business owners, which is evidenced at alumni events when each has the opportunity set up as a vendor to sell goods and promote their business. This further indicates resourcefulness and tenacity of women from the area.

Even though insightful, the valuable information obtained from the open-ended questions regarding lived experience of the individual cannot be inferred to the larger population. Outcomes differed from results of the linear regression in that support was found to be a

motivating influence for participants to pursue higher education – a dominant code in thematic analysis – but social support showed no statistical significance in quantitative results. Access to reliable transportation was moderately significant in the regression, but only five participants from the sample identified lack of transportation as a barrier to pursuing higher education. For future studies, it may be beneficial to avoid selecting *a priori* factors and allow participants to identify which constructs provide adequate representation of contributors to resilience. Last but not least, it is imperative that future studies consider the vulnerability of women from central Appalachia if the same participant sample is utilized.

### **Limitations and Assumptions**

The writer assumed the return rate for surveys in the mail would be lower compared to survey completion rates when administered in person. The provision of a stamped, pre-addressed return envelope did not guarantee completion. Another limitation regarding return rate was that, according to the directors, previous mailings have had low return rates, and many graduates have not updated their addresses with NOSW since completion of the program. Therefore, it was probable that many envelopes would be returned to the researcher as “unable to forward” or “not deliverable as addressed” by the postal service. Another limitation was the possibility of some envelopes being returned incomplete (e.g., the informed consent is missing or measures were not completed), which means those were not included in the analysis unless the participant signed and returned the consent document.

A primary limitation of this study is that the value of lived experience for each participant was not discussed. Since the study was predominantly quantitative in nature, participants were limited in what they could share in two open-ended questions on the survey. Some participants wrote a lot of information – up to a page – and others wrote one or two words in response to the

questions. Identified themes from both questions were extremely valuable, but full narratives from participants were not possible since interviews were not part of data collection. For example, “supportive family” is highly subjective to the individual and may not be indicated by each participant in the open-ended questions. Additionally, since convenience sampling was the means for recruiting participants, the sampling was also purposeful for this study, and results cannot be generalized to the larger population.

Although the research design did not provide insight into the lived experience of participants of NOSW, the linear regression and thematic analysis identified the combination of factors predicting resilience for rural, central Appalachian women who choose to improve their personal and professional circumstances by attending the NOSW. Based on previous studies where the measures were used on similar populations, the Resilience Scale and SWLS Scale were chosen as reliable and valid instruments for the study. Additionally, questionnaires such as the participant survey and self-report instruments, such as both measures chosen for this study, may be used to “measure both the predictor [independent] variables and the criterion in a prediction study” (Gall, Borg, & Gall, 1996, p. 423).

Another limitation of this study is the Resilience Scale (Wagnild & Young, 1990), as it does not specifically examine social support as a contributor to resilience (Friborg, 2003). In a detailed review of two resilience scales developed in the 1990s, one of which was used in this study, neither scale assessed for impact of family and external support (Friborg, 2003). Since the presence of a support network was not statistically significant in results from this study, one could speculate if a resilience measure that assessed for such support had been used, results may have been different. Although Wagnild and Young’s (1990) Resilience Scale was chosen for this study due to its prior use with the SWLS and necessary validity for the convenience sample

chosen, a future study with a similar participant sample may benefit from using a different scale to assess the impact of social support.

Another limitation of the study is the inability to follow up with participants to clarify the meanings of open-ended responses. Most responses fit with identified themes from the literature, but having limited personal input from the participants leaves the reader unable to make generalizable conclusions based on data. For example, many participants listed “family members” as the primary influence behind their decision to pursue higher education. It is impossible to know exactly what is meant by the term “family” and how each participant experienced family members’ support without follow up. Other participants indicated they had not pursued higher education due to various reasons related to family (i.e., abusive relationships, having to work to provide for family, and lack of childcare).

Ambiguity of the concept of resilience is another limitation for the study. Definitions of resilience vary by author. Although resilience was discussed in the informed consent that each participant reviewed and signed, she may have not had a clear understanding of the concept of resilience. Lack of understanding of the concept as well as ambiguity of the construct may have contributed to sporadic selection of responses on the measure. Since the study was predominantly quantitative, it was not possible to follow up with participants to determine if clarification of the definition of resilience was needed prior to completing the measure. Results cannot be generalized to the larger population due to purposeful convenience sampling for participants.

### Conclusion

This study provides a helpful perspective through a strengths-based lens on resilience for women who live in central Appalachia. A combination of independent variables indicated statistical significance; including satisfaction with life and access to transportation. Qualitative outcomes provided further insight into contributors for resilience for the participant sample. Future studies with similar populations in rural areas could focus on resilience and satisfaction with life on a larger scale to influence the deficit-laden narratives that pervade in professional literature. With an abundance of natural resources and individuals committed to seeing central Appalachia thrive, such studies would create a new context for examining rural resilience and what it looks like for those who live there. Native Appalachians are aware of what life is like in their respective states and why negative stereotypes exist. The same individuals could help foster the rebranding of the area by creating narratives that focus on utilization of available resources in addition to what is already working well. Understanding “sources of strength and resilience in these families...not just problems they face” (Orthner et al., 2004, p. 159) is essential for future research.

While the outcomes of this study may provide limited insight into which variables contribute most to resilience for women in the sample, it is imperative to maintain a vision of the bigger picture for women from central Appalachia. Cultural factors such domestic violence, social isolation, and lack of resources are real issues that prevail for women from the area. These issues have been acknowledged and validated in many other platforms prior to this study. For those in the helping professions, it is essential to not only have an awareness of the issues, but to also be aware of the available resources and options that could help individuals along the way. As Werner (2005) discussed regarding adults in the Kauai Longitudinal Studies, being part of an



identified “high risk” group is not synonymous with losing at life. Life in Appalachia is not a dead-end street. With innovative leaders like Jane Stephenson and programs like NOSW, women from the area will continue to have access to opportunities for development and higher education. Whether future participants attend the three-week or one-week cohort, individuals will have access to resources and social support that will foster resilience and contribute to life satisfaction. Building individual resilience does not imply life will get easier or that problems will cease to exist, but through the acknowledgement and enhancement of protective factors, individuals will therefore be able to draw upon resources to assist them when needed.

This study also provides a unique contribution to the literature as it examined resilience for adult women from rural areas. An abundance of literature exists on resilience for children and adolescents. Literature on issues in rural areas are also pervasive in the fields of health and the social sciences. While the complexities of life in a geographically isolated area are worthy of additional study, more attention should be given to resilience and what is working well for women in central Appalachia. These studies could give additional information on other variables that predict resilience for those who decide to pursue higher education.

The spirit of Appalachia is alive and well as evidenced by ongoing revitalization efforts in communities and small towns and the fierce tenacity of individuals who are determined to better themselves and give back to the place they call home. The women who chose to participate in this study took necessary first steps for self-improvement and cultivation of personal resilience by making the decision to attend the New Opportunity School for Women. A consistent theme among each participant’s response indicated the NOSW opened doors for them that would not have opened otherwise. Much can be said about the courage required to take the first step toward personal and professional development, but as Participant 48 said in her

response: “I know in my heart of hearts that the clear, cool water that flows from these mountains flows in me...as nothing can stop the flow of water, nothing can stop an Appalachian woman...strength encases her so she can face anything and come out ahead.”.

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APPENDICES

**APPENDIX A: Approval Form – TCU Institutional Review Board**

TCU INSTITUTIONAL REVIEW BOARD

Approval Form

Institutional Review Board (IRB) approval refers to research involving human subjects whether on or off Campus. Significant changes in design, participants, or measures must be approved by the IRB. Multiyear projects must be submitted annually for approval. Any unexpected adverse effects on human subjects due to procedure should be reported immediately.

Date: March 29, 2016

Principal Investigator: Frank Thomas

Project Title: Factors contributing to resilience for women pursuing higher education: A focus on Central Appalachia

Multi-year Project:    Yes            X    No

Proposed Participants:

- TCU students, faculty, or staff
- Non-TCU Participants
- Special Populations (e.g. children) – specify:

Approval Period: 3/29/16-3/28/17

Board Comments: Reviewed by Anna Petursdottir, IRB Chair. Research is minimal risk and expedited according to 45 CFR 46.110 (5, 7).

Approval Number: 1603-027-1603

Board Decisions:

Approved, Minimal Risk

Approved, Expedited

Approved, Exempt Status

Conditional Approval, with following stipulations:

Not Approved for these reasons:



IRB Chair

Date 3/29/2016



**APPENDIX B: IRB Amendment Approval Form – TCU Institutional Review Board**

TCU INSTITUTIONAL REVIEW BOARD

Approval Form

Institutional Review Board (IRB) approval refers to research involving human subjects whether on or off Campus. Significant changes in design, participants, or measures must be approved by the IRB. Multiyear projects must be submitted annually for approval. Any unexpected adverse effects on human subjects due to procedure should be reported immediately.

Date: September 21, 2016

Principal Investigator: Frank Thomas

Project Title: Factors contributing to resilience for women pursuing higher education: A focus on Central Appalachia.

Multi-year Project: Yes X No

Proposed Participants:

TCU students, faculty, or staff

X Non-TCU Participants

Special Populations (e.g. children) – specify

Approval Period: 03/29/16-03/28/17

Board Comments: Amendment-to retrieve informed consents from participants who already submitted all completed documents via mail without consents.

Reviewed by TCU Co-Chair, Dennis Cheek and determined to be no more than minimal risk-45CFR46 110(b)(7)

Approval Number: 1603-027-1603AM

Board Decisions:

Approved, Minimal Risk

X Approved, Expedited

Approved, Exempt Status

Conditional Approval, with following stipulations:

Not Approved for these reasons:



IRB Chair

Date 09/21/2016

**APPENDIX C: TCU Consent to Participate in Research**



Read front & back and  
Sign; return with  
completed scales and  
survey.

## CONSENT TO PARTICIPATE IN RESEARCH

**Title of Research:** Factors Contributing to Resilience for Women Pursuing Higher Education: A Focus on Central Appalachia

**Funding Agency/Sponsor:** None

**Study Investigators:** Frank Thomas, PhD, LMFT – Principal Investigator  
Olivia Wedel, M.Ed., LPC-Intern, LCDC – TCU Doctoral Candidate

**What is the purpose of the research?**

The purpose of the research is to identify factors that contribute to resilience for women in rural Appalachia who decide to pursue higher education.

**How many people will participate in this study?** 100-200 current students and graduates of the New Opportunity School for Women.

**What is my involvement for participating in this study?** You will be asked to complete a brief demographic survey, the Resilience Scale, and the Life Satisfaction Scale.

**How long am I expected to be in this study for and how much of my time is required?**

This study will take approximately nine months to complete. You will complete the surveys and scale either by mail or during a scheduled meeting with other students in the program. The survey and both scales will take approximately 45-60 minutes to complete.

**What are the risks of participating in this study and how will they be minimized?**

Risks of participating in the study are minimal from the beginning. You may have some anxiety over answering survey questions, and responding to a scale assessing resilience and life satisfaction. Risk will be minimized by conversations with the principal investigator and student researcher prior to completion, and you may ask questions at any time during the study.

**What are the benefits for participating in this study?**

Benefits for participating in this study vary, but the primary goal is to identify what contributes to individual resilience following your decision to pursue higher education. Your participation will highlight your personal and professional achievements, as well as invite discussion on education as a deterrent to poverty.

**Will I be compensated for participating in this study?**

Yes. Compensation for participating in this study will be in the form of a gift card in the amount of \$25.00 to either Walmart or Amazon.

**What is an alternate procedure(s) that I can choose instead of participating in this study?**

There are no alternate procedures that can be chosen in lieu of participating in this study.

**How will my confidentiality be protected?**

You will identify yourself on the survey and scales by backward initials, and shared initials of participants will be numbered (ex. SS1, SS2, and so forth). Scale and survey responses will not be associated with your name at any time.

**Is my participation voluntary?**

Your participation is voluntary, and you do not have to participate.

**Can I stop taking part in this research?**

You may stop participating at any time without repercussion.

**What are the procedures for withdrawal?**

You may withdraw by contacting either the principal investigator via email ([f.thomas@tcu.edu](mailto:f.thomas@tcu.edu)) or postal mail (Dr. Frank Thomas, TCU Box 297900, Fort Worth, TX 76129) or the student researcher, Olivia Wedel (817-721-9570).

**Will I be given a copy of the consent document to keep?**

Yes, each participant will be given a copy of their signed consent document.

**Who should I contact if I have questions regarding the study?**

You may talk to Jane Stephenson, founder of New Opportunity School for Women, or Dr. Frank Thomas, the principal investigator, at 817-257-6562. You may also talk to Olivia Wedel, the student researcher, at 817-721-9570.

**Who should I contact if I have concerns regarding my rights as a study participant?**

Dr. Anna Petursdottir, Chair, TCU Institutional Review Board, Phone 817 257-6436.

Dr. Bonnie Melhart, TCU Research Integrity Office, Telephone 817-257-7104.

Your signature below indicates that you have read or been read the information provided above, you have received answers to all of your questions and have been told who to call if you have any more questions, you have freely decided to participate in this research, and you understand that you are not giving up any of your legal rights.

**Participant Name (please print):** \_\_\_\_\_

**Participant Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Investigator Name (please print):** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Investigator Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

APPENDIX D: Participant Survey

Backward Initials of Participant: \_\_\_\_\_ NOSW Location: \_\_\_\_\_

**PARTICIPANT SURVEY**

**\*Surveys will be distributed upon receipt of the signed Informed Consent\***

1. What is your age at the time of this survey? \_\_\_\_\_
2. What is your current marital status? \_\_\_\_\_
3. How many dependents are under your care? \_\_\_\_\_  
Dependents over 18 \_\_\_\_\_ Dependents under 18 \_\_\_\_\_
4. What is your race? \_\_\_\_\_
5. What is your ethnicity? \_\_\_\_\_
6. What is your religious affiliation? \_\_\_\_\_
7. How many miles do you live from your location of NOSW? \_\_\_\_\_
8. Do you have access to reliable transportation? YES NO
9. Do you have access to healthcare, including dental and vision? YES NO
10. Do you have trustworthy, affordable access to childcare if needed? YES NO
11. What is your monthly income? \_\_\_\_\_
12. How many family members do you have who are supportive of your educational and career goals?  
\_\_\_\_\_
13. How many close friends, from either your community, church group, or school are supportive of your educational and career goals? \_\_\_\_\_
14. How many people in your immediate family, including your parents, have a college degree?  
\_\_\_\_\_
15. If you could identify one reason you have not pursued higher education prior to enrolling in NOSW, what would it be? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
16. In just a few sentences, what or who would you identify as the primary influence behind your decision to attend NOSW? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPENDIX E: Intellectual Property License Agreement for The Resilience Scale**



**INTELLECTUAL PROPERTY LICENSE AGREEMENT**  
**Students & Residents of Developing Countries**

This Intellectual Property License Agreement ("Agreement") is made and effective this 16 February 2016 ("Effective Date") by and between The Resilience Center, PLLP ("Licensor") and Olivia Wedel ("Licensee").

Licensor has developed and licenses to users its Intellectual Property, marketed under the names "the Resilience Scale for Kids", and "RS10" (the "Intellectual Property").

Licensee desires to use the Intellectual Property.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, Licensor and Licensee agree as follows:

1. **License.**  
Licensor hereby grants to Licensee a 1-year, non-exclusive, limited license to use the Intellectual Property as set forth in this Agreement.
2. **Restrictions.**  
Licensee shall not modify, license or sublicense the Intellectual Property, or transfer or convey the Intellectual Property or any right in the Intellectual Property to anyone else without the prior written consent of Licensor. Licensee may make sufficient copies of the Intellectual Property and the related Scoring Sheets to measure the individual resilience of up to 300 subjects, for non-commercial purposes only.
3. **Fee.**  
In consideration for the grant of the license and the use of the Intellectual Property, subject to the Restrictions above, Licensee agrees to pay Licensor the sum of US\$75.
4. **Term.**  
This license is valid for twelve months, starting at midnight on the Effective Date.
5. **Termination.**  
This license will terminate at midnight on the date twelve months after the Effective Date.
6. **Warranty of Title.**  
Licensor hereby represents and warrants to Licensee that Licensor is the owner of the Intellectual Property or otherwise has the right to grant to Licensee the rights set forth in this Agreement. In the event any breach or threatened breach of the foregoing representation and warranty, Licensee's sole remedy shall be to require Licensor to do one of the following: i) procure, at Licensor's expense, the right to use the Intellectual Property, ii) replace the Intellectual Property or any part thereof that is in breach and replace it with Intellectual Property of comparable functionality that does not cause any breach, or iii) refund to Licensee the full amount of the license fee upon the return of the Intellectual Property and all copies thereof to Licensor.
7. **Warranty of Functionality.**  
Licensor provides to Licensee the Intellectual Property "as is" with no direct or implied warranty.
8. **Payment.**  
Any payment shall be made in full prior to shipment. Any other amount owed by Licensee to Licensor pursuant to this Agreement shall be paid within thirty (30) days following invoice from Licensor. In the event any overdue amount owed by Licensee is not paid following ten (10) days written notice from Licensor, then in addition to any other amount due, Licensor may impose and Licensee shall pay a late payment charge at the rate of one percent (1%) per month on any overdue amount.
9. **Taxes.**  
In addition to all other amounts due hereunder, Licensee shall also pay to Licensor, or reimburse Licensor as appropriate, all amounts due for tax on the Intellectual Property that are measured directly by payments made by Licensee to Licensor. In no event shall Licensee be obligated to pay any tax paid on the income of Licensor or paid for Licensor's privilege of doing business.
10. **Warranty Disclaimer.**  
LICENSOR'S WARRANTIES SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

11. Limitation of Liability.

Licensor shall not be responsible for, and shall not pay, any amount of incidental, consequential or other indirect damages, whether based on lost revenue or otherwise, regardless of whether Licensor was advised of the possibility of such losses in advance. In no event shall Licensor's liability hereunder exceed the amount of license fees paid by Licensee, regardless of whether Licensee's claim is based on contract, tort, strict liability, product liability, or otherwise.

12. Support.

Licensor agrees to provide limited, e-mail-only support for issues and questions raised by the Licensee that are not answered in the current version of the *Resilience Scale User's Guide*, available on [www.resiliencescale.com](http://www.resiliencescale.com), limited to the Term of this Agreement. Licensor will determine which issues and questions are or are not answered in the current *User's Guide*.

13. Notice.

Any notice required by this Agreement or given in connection with it, shall be in writing and shall be given to the appropriate party by personal delivery or by certified mail, postage prepaid, or recognized overnight delivery services.

If to Licensor:

The Resilience Center, PLLC  
PO Box 313  
Worden, MT 59088-0313

If to Licensee:

Name: Olivia Wedel  
Address: 603 Bayless Drive  
Eules, Texas 76040  
UNITED STATES

14. Governing Law.

This Agreement shall be construed and enforced in accordance with the laws of the United States and the state of Montana. Licensee expressly consents to the exclusive forum, jurisdiction, and venue of the Courts of the State of Montana and the United States District Court for the District of Montana in any and all actions, disputes, or controversies relating to this Agreement.

15. No Assignment.

Neither this Agreement nor any interest in this Agreement may be assigned by Licensee without the prior express written approval of Licensor.

16. Final Agreement.

This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. This Agreement may be modified only by a further writing that is duly executed by both Parties.

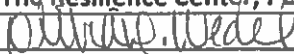
17. Severability.

If any term of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, then this Agreement, including all of the remaining terms, will remain in full force and effect as if such invalid or unenforceable term had never been included.

18. Headings.

Headings used in this Agreement are provided for convenience only and shall not be used to construe meaning or intent.

IN WITNESS WHEREOF, the Parties hereto have duly caused this Agreement to be executed in its name on its behalf, all as of the day and year first above written.

Licensee	The Resilience Center, PLLP
Signature:	
Printed Name: Olivia Wedel	Gail M. Wagnild, PhD
Title: Student	Owner and CEO
Date: 16February 2016	16 February 2016

**APPENDIX F: The Resilience Scale**

## RESILIENCE SCALE™

Date \_\_\_\_\_

Please read each statement and circle the number to the right of each statement that best indicates your feelings about the statement. Respond to all statements.

Circle the number in the appropriate column	Strongly Disagree							Strongly Agree
	1	2	3	4	5	6	7	
1. When I make plans, I follow through with them.	1	2	3	4	5	6	7	
2. I usually manage one way or another.	1	2	3	4	5	6	7	
3. I am able to depend on myself more than anyone else.	1	2	3	4	5	6	7	
4. Keeping interested in things is important to me.	1	2	3	4	5	6	7	
5. I can be on my own if I have to.	1	2	3	4	5	6	7	
6. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7	
7. I usually take things in stride.	1	2	3	4	5	6	7	
8. I am friends with myself.	1	2	3	4	5	6	7	
9. I feel that I can handle many things at a time.	1	2	3	4	5	6	7	
10. I am determined.	1	2	3	4	5	6	7	
11. I seldom wonder what the point of it all is.	1	2	3	4	5	6	7	
12. I take things one day at a time.	1	2	3	4	5	6	7	
13. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7	
14. I have self-discipline.	1	2	3	4	5	6	7	
15. I keep interested in things.	1	2	3	4	5	6	7	
16. I can usually find something to laugh about.	1	2	3	4	5	6	7	
17. My belief in myself gets me through hard times.	1	2	3	4	5	6	7	
18. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7	
19. I can usually look at a situation in a number of ways.	1	2	3	4	5	6	7	
20. Sometimes I make myself do things whether I want to or not.	1	2	3	4	5	6	7	
21. My life has meaning.	1	2	3	4	5	6	7	
22. I do not dwell on things that I can't do anything about.	1	2	3	4	5	6	7	
23. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7	
24. I have enough energy to do what I have to do.	1	2	3	4	5	6	7	
25. It's okay if there are people who don't like me.	1	2	3	4	5	6	7	

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**APPENDIX G: Satisfaction with Life Scale**

## Satisfaction with Life Scale (SWLS)

### Permission to Use

The scale is copyrighted but you are free to use it without permission or charge by all professionals (researchers and practitioners) as long as you give credit to the authors of the Scale: Ed Diener, Robert A. Emmons, Randy J. Larsen and Sharon Griffin as noted in the 1985 article in the *Journal of Personality Assessment*.

<http://internal.psychology.illinois.edu/~ediener/SWLS.html>

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

\_\_\_\_\_ In most ways my life is close to my ideal.

\_\_\_\_\_ The conditions of my life are excellent.

\_\_\_\_\_ I am satisfied with my life.

\_\_\_\_\_ So far I have gotten the important things I want in life.

\_\_\_\_\_ If I could live my life over, I would change almost nothing.

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied

**APPENDIX H: Application & Enrollment Criteria for the New Opportunity School for Women**



# New Opportunity School for Women at Lees-McRae College

PO Box 128  
Banner Elk, NC 28604

## Contact Information

Jennie Harpold, Director of NOSW  
Phone: 828.898.8905  
Email: nosw@lmc.edu  
Web: www.lmc.edu/nosw

## Application | Three-week Summer Session (June 11–July 1, 2017)

Please read and follow the directions carefully. If a question does not apply to you, write in the blank "not applicable" or "N/A". Application must be returned to the address above. You are strongly advised to have your application in by May 1.

### Section 1: About You

Today's Date: \_\_\_\_\_

Full Name: \_\_\_\_\_

Name that you wished to be called: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Other Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Do you have: A Drivers License?  Yes  No

Marital Status: \_\_\_\_\_

Health Insurance?  Yes  No

Number of children and their ages: \_\_\_\_\_

A Medical Card?  Yes  No

Name, relationship, and age of all persons currently living in your home: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Your ethnic origin (optional): Information requested is voluntary. It will not be used in making an admissions decision, but is collected for Institutional research and reporting purposes.

White

African American

Asian or Pacific Islander

Hispanic

American Indian or Native Alaskan

Other

Because the New Opportunity School for Women at Lees-McRae College seeks to serve those of limited financial resources, income will be a strong consideration in choosing participants for the program. Please check the category that best represents your FAMILY income. (Be prepared to submit recent tax forms if requested.)

\$0 - 10,000 per year

\$10,000 - 15,000 per year

\$15,000 - 20,000 per year

If your income is more than \$20,000 per year, please list your income per year: \$ \_\_\_\_\_

List sources of income (e.g., work, spouse/partner's work, alimony, welfare benefits, etc.) \_\_\_\_\_

\_\_\_\_\_

Please explain any recent unusual financial difficulties: \_\_\_\_\_

\_\_\_\_\_

Have you ever been convicted of a felony or misdemeanor by any court including local, state, federal, or military?  Yes  No

If yes, please give date and explain. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Section 2: Work and Education

**Educational Experience:** Please list and give the dates of any high schools, colleges, business or vocational schools that you have attended and degrees or certificates awarded to you, including a GED. (attach extra sheet if necessary)

Dates	School	Highest Level Achieved
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Job Experience:** List any jobs that you have held since high school and the approximate date you held the job. Briefly describe your duties in each position. Please start with your most recent work experience. (attach extra sheet if necessary)

Dates	Position/Employer	Duties
_____	_____	_____
_____	_____	_____
_____	_____	_____

Are you currently employed?  Yes  No If yes, how many hours a week do you work? \_\_\_\_\_

If you have recently stopped working, please state the reason. \_\_\_\_\_

Please list any volunteer work you may have done in your community, church, or school. \_\_\_\_\_

Have you previously had career courses or career counseling?  Yes  No

If yes, please give date and describe. \_\_\_\_\_

Have you applied to a college or vocational school within the last year?  Yes  No

If yes, list the school: \_\_\_\_\_ Have you been accepted?  Yes  No

When do you plan to begin? \_\_\_\_\_

## Section 3: You and the New Opportunity School for Women

Note: Please understand that this three-week residential program generally requires physical activities including but not limited to walking (i.e. walking to and from classes, fieldtrips, etc.), climbing stairs, and sitting for long periods of time (i.e. in class, riding in a vehicle, etc.). The New Opportunity School for Women at Lees-McRae College takes very seriously its role as host to all participants each session which requires that each participant must conduct herself in a safe and productive manner.

How did you hear about the New Opportunity School for Women? \_\_\_\_\_

**There is a limited amount of money available for child care and travel expenses.**

Please list the total amount of money require for travel expenses to come to Banner Elk for the three-week session, if any. \_\_\_\_\_

Please list the total amount of money required for child care expenses while in Banner Elk for the three-week session, if any. \_\_\_\_\_

## **Section 4: Essay and Recommendations**

**Attach to this application two letters of recommendation from people who know you well (i.e. ministers, teachers, employers, social workers, volunteer coordinators, or relatives). Please ask that they describe their relationship to you, how long they have known you, and why they feel you would be a good candidate for this program. They should also include their contact information and phone number on their letter.**

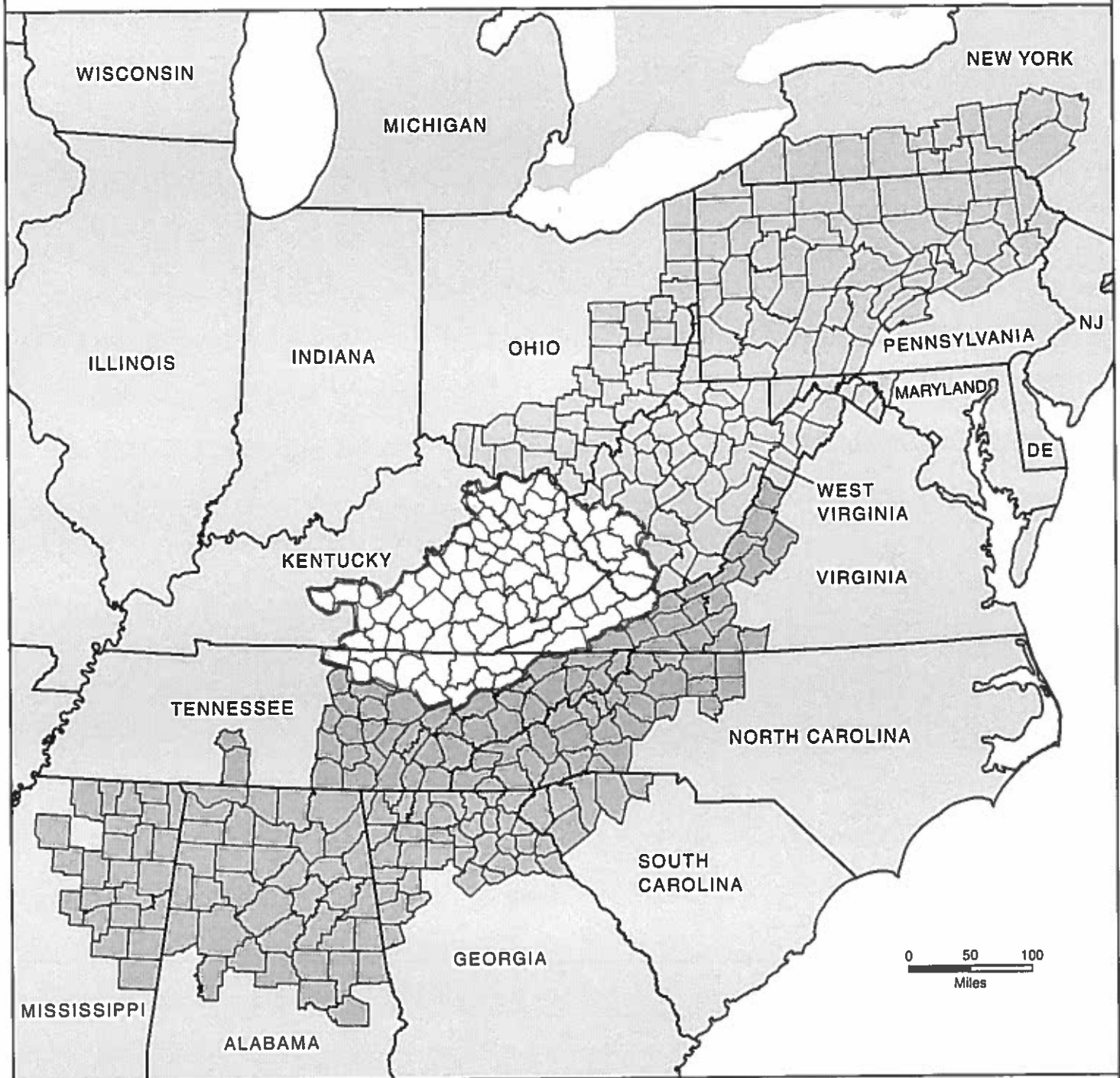
Please explain why you want to attend the New Opportunity School for Women at Lees-McRae College and how you think it will help you. Feel free to discuss any unique circumstances that you think merit consideration. Without this personal statement and two letters of recommendation, your application will not be considered. You may attach extra sheets of paper.

**If selected, I agree to attend the entire three-week program of the New Opportunity School for Women at Lees-McRae College and participate fully in all scheduled activities.**

Signature of Applicant: \_\_\_\_\_ Date: \_\_\_\_\_






**APPENDIX I: Map of Sub-Regions of Appalachia**

# Subregions in Appalachia



The Appalachian subregions are contiguous regions of relatively homogeneous characteristics (topography, demographics, and economics) within Appalachia. This classification was developed in the early history of the ARC and provides a basis for subregional analysis. ARC revised the classification in November 2009 by dividing the Region into smaller parts for greater analytical detail and by using current economic and transportation data.

## Subregions

-  Northern
-  North Central
-  Central
-  South Central
-  Southern

**APPENDIX J: Description of the New Opportunity School for Women Program**

As indicated in the background of the study, the New Opportunity School for women grew out of the dire need for women to become not only employed, but better educated. Women who do not have a college degree may apply and attend the program free of charge. In some instances, assistance with childcare and transportation may be provided.

NOSW Berea hosts two three-week sessions on campus annually and has recently started a new initiative where a one-week version of the program is offered in various counties in Kentucky. The one-week model was created due to many factors that prevent women from leaving home for three weeks in a row. The one-week session is a condensed version of what the participants would do in three weeks, and truly meets the participants where they are located. NOSW programs at Lees-McRae College and Bluefield College host one three-week session annually.

Each program is staffed with a program director who oversees recruitment, training, and other day to day operations. A typical three-week session allows participants to engage in a job internship, practice self-defense techniques, learn about civic duties and other ways to give back in their communities, and study Appalachian literature. Participants also attend sessions on self-esteem and emotion regulation, basic computer skills, interviewing and resume writing, promoting self-awareness and “finding their voice,” and other related topics with the goal of supporting personal self-efficacy. The participants also have access to other support services while attending, such as health screenings, dental work, and counseling.

NOSW graduates are strong, positive role models for those who are considering personal and professional development. Many of the graduates go on to complete college degrees, find gainful employment, and/or start their own businesses. The founder, Mrs. Stephenson, is active with each of the programs and is as a positive influence for participants.