Spring 2016

"Knee high to a grasshopper": An exploration of Appalachian youth, family communication patterns, and depression

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"Knee High to a Grasshopper":
An Exploration of Appalachian Youth, Family Communication Patterns, and Depression
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A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Master of Arts

Communication and Advocacy

May 2016

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Acknowledgements

I would like to begin by thanking the entire graduate faculty in the Communication & Advocacy Master's program at James Madison University for continuing to believe in myself and the rest of my cohort. Specifically, I would like to thank Drs. Brigham, Britt, Carmack, Davis, Harvell, Nelson, and Richards for challenging me to research, develop, and articulate my own notions of Health Advocacy in new and elevated ways through your graduate courses. And though somewhat unrelated to the thesis, I'd like to also thank Drs. Ball, Davis, and Whitfield for confirming my passion for teaching and helping me continue to get better at it. My family and friends have my gratitude as well – especially Mom, Dad, Grandma, Ed, Diana, Amanda, Gavin, and Katie– for anchoring me in times of whirlwind frustrations, wiping my tears, and pouring my wine while being subjected to my antics as I recharged my overworked soul.

My thesis committee members deserve particular acknowledgement. Drs. Leigh Nelson, Heather Carmack, and Lindsey Harvell were instrumental in guiding the development of the thesis, as well as my development as a researcher, writer, and decent human being. The continued encouragement all of you offered made a huge difference in my life. Never before has anyone invested so much into me, my work, and my future. The thesis would not be what it is, nor would I be the scholar I am, without the selfless mentorship of Dr. Nelson. And so to you Dr. Nelson, my committee, and to my family and friends, and professors and cohort peers, I simply say, thank you.

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Abstract

This thesis examined factors related to family communication and the prevalence of depression in Appalachian youth. Two quantitative studies were utilized to gather data. The first study tested the measures on Virginia college students to determine if family communication and depressive symptomology were related. Study two took place in one Virginia high school and one North Carolina high school that were identified to be in the Appalachian region. Utilizing a conformity orientation family communication style was positively correlated with depressive symptomology in both the college sample and in the Appalachian samples.

Keywords: health communication, family communication, Appalachia, mental health, adolescents

CHAPTER 1: INTRODUCTION & LITERATURE REVIEW

Growing up Appalachian means playing in the creek and catching crawdads. It's shooting milk jugs with the BB gun you got on Christmas morning. It's helping can beans, corn and peas. It's the smell of coffee and hearing your neighbor, Grayson, play his banjo. Growing up Appalachian is feeling the security of the mountains and thinking they can forever protect you from the rest of the world. There have been many times in my life where I have been made to feel like I was second class as an Appalachian American. There are so many stereotypes of toothless hillbillies dating their cousins without shoes. Well, my mother took us to the dentist every 6 months. I have always had more shoes than I could wear. And I don't have a single cousin who I am romantically interested in. People who believe these things do not know my Appalachia. My Appalachia is about family. It's about good people. It's about hard work. It's about pride. It's about home.

- Lisa Daniels

"The mountains shape people's lives" (Behringer & Friedell, 2006, p. 3). It is not only apparent in the way they talk or the way they cook; Appalachian people live a different life. There is a rarely seen world of folk music, dancing, and artisan crafts. Sadly, amongst all this beauty is a life of invisible struggle. Not only is Appalachia a region plagued by poverty, its population faces many other demons, as well. According to a 2010 Gallup Poll, Appalachia represents 54% of America's most highly depressed regions (Crabtree, 2011). Similarly, the individuals living in Appalachian counties are known for a high risk for depression (Smokowski, Evans, Cotter, & Guo, 2014; Zullig & Hendryx, 2011). Sadly, resources are limited in the area, and conversations about mental

health are sparse and stigmatizing. Very few messages about resources reach this detached population.

It is well known that individuals are more receptive to messages when they can identify with them (Vallone et al., 2011). However, individuals in Appalachia are not receiving messages that are culturally relevant to them. Thus, even if a message is reaching them, they might not believe it relates to them. Information about specific characteristics in each population is necessary to create needed resources, campaigns, and materials. Thus, it is important to study specific communities like Appalachia and not just mainstream populations. This thesis aims to be a catalyst for research in Appalachia populations.

The Revised Family Communication Pattern (RFCP) will be the backbone of this thesis. Like many scholars (Elwood & Schrader, 1998; Fife, Nelson, & Messersmith, 2014; Luebbe & Bell, 2014; Noorafshan, Jowkar, & Hosseini, 2013), this thesis will apply the RFCP, which is traditionally used in family communication research, to a different subgenre of communication: health. Scholarship is available on the relationship between family environment and mental health (Olsson, Nordström, Arinell, & von Knorring, 1999) and Wamoyi, Wight, and Remes (2015) offered the relationship between family interactions, nurturing environments, and emotional stability. This thesis will attempt to examine the possibility of familial and cultural factors of Appalachia contributing to the high rates of depression experienced in the area.

Study 1 examines the correlation between family communication styles and depressive symptoms in college-aged students. In the first quantitative phase of the study, pilot survey data were collected from college students at a large Southeastern university

to assess whether family communication relates to the occurrence of depression in youth. This research is important for two reasons. First, it will generate new statistical data on college students experiencing depressive symptoms. Second, this study acts as a testing ground for the main study.

The main study explored whether depression in Appalachian high school students is related to their family communication styles. Understanding the relationship of family communication and depression can help illuminate the problems related to depression by addressing family ties and how resources in the Appalachian area should be allocated.

The rest of this chapter will investigate variables of Appalachian culture, depression, and family communication. Chapter 2 will report participant information, the distribution of surveys, and the analysis of quantitative data collected during Study 1 at a local university. Chapter 3 will discuss the process of data collection, report findings, and highlight key results of Study 2 in Appalachia. Chapter 4 will explain the implications of this thesis and potential aims for future investigations.

Appalachian Culture

Appalachia is usually defined as the region that runs north to south along the Appalachian Mountains located close to the Eastern shore of the U.S. (Philips, 2007). However, without having specified borders, what mountainous regions qualify as Appalachia is an ongoing debate (Cooper, Knotts, & Elders, 2011). Cooper et al. (2011) argued, due to the lack of definition regarding Appalachia's reaches, membership in this community hinges on cultural identification more than on physical location. This section is going to explore what it means to be Appalachian, starting with the poverty that runs rampant through the region.

Poverty and Appalachia are heavily associated (Precourt, 1991). It is not just a lack of money; it is a system. Poverty revolves around a lack of resources including health, motivation, natural resources, community services, mass media, housing, education, and socioeconomic status (Harrington, 1962; Precourt, 1991; Wilber, 1975). Appalachia is heavily stigmatized as being backward and impoverished since the 1930s, which is when large, northern industries and political agencies began to scrutinize farming (Precourt, 1991). Precourt (1991) argued that the commercial market system of the north began evaluating Appalachia people and productivity by a new standard: economic performance. What was once considered traditional, a simple way of life and farming, was now considered poverty.

Poverty, coupled with the scrutiny from the north, lead Appalachian people to develop a different identity and concept of "self." In urban populations, individuals have a definitive self; their acts define their identity (Precourt, 1991; Wright, 1971). In Appalachia, however, one's identity is given: what kind of person they view themselves as determines what they shall accomplish, not the other way around (Precourt, 1991; Wright, 1971). Because Appalachian individuals are told they are poor, they never see themselves as anything other than poor, or believe they can become anything besides poor. These factors influence the 10 different traits that characterize the Appalachian culture: individualism, traditionalism, fatalism, action seeking, person-orientedness, migration, isolation, family, religion, and adaptation (Fisher, 1991).

Being independent is a highly sought after trait in American culture. However, in Appalachia, people have turned independence to individualism. Appalachians have adopted a very self-centered "if it doesn't directly help me, I won't do it" attitude

(Campbell, 1921; Fisher, 1991). Appalachian people have a very limited understanding of "the greater good." This creates barriers between them and those who wish for regional progress, such as employment and wealth-generating opportunities (Campbell, 1921; Fisher, 1991).

Appalachian culture has the reputation of being traditional and old fashioned (Larson, 1978; Lewis & Billings, 1997; Snyder & McLaughlin, 2004; Willits, Bealer, & Crider, 1982). Traditionalism manifests itself in Appalachian culture in two ways. First, people residing in the Appalachian region have a very regressive outlook, meaning they look to the past and see happiness they do not see for today (Fisher, 1991; Weller, 1966). Thus, these individuals do not plan or encourage change. Second, Appalachia is existence oriented, as opposed to the rest of America which is improvement oriented (Fisher, 1991; Weller, 1966). Appalachia is only concerned with just getting by and fulfilling the very minimal needs. Beauty, among other things, is not valued or necessary (Fisher, 1991; Weller, 1966).

Traditional values are still present in Appalachia, such as a respect for nature, being kind, friendly, and helpful (North American Mission Board [NAMB], 2015). NAMB (2015) stated that Appalachian culture is still flourishing, evidenced through their own dialect of English, arts and crafts, music, dancing, and foods. However, not all traditions are positive.

Appalachian people are highly mistrusting of strangers, such as health care professionals, and are resistant to change (NAMB, 2015). Behringer and Friedell (2006) stated Appalachian traditional values include not seeking attention, and attempting to solve one's own problems. Furthermore, and of even more serious concern, Appalachians

still experience high levels of domestic violence, family conflict, and marriage at early ages (Heaton, Litcher, & Amoateng, 1989; Snyder & McLaughlin, 2004; Websdale, 1998). These traditional Appalachian values also influence parenting styles. Individuals who follow these traditional parenting roles are more likely to use harsh parenting practices and are less willing to talk with their children about certain risky behaviors such as substance use, sexual behavior, and violence (Conger & Elder, 1994; Scaramella, Conger, Simons, & Whitbeck, 1998; Snyder & McLaughlin, 2004).

Fatalism, the belief that one has no control over what happens to them, is another traditional Appalachian value (Fisher, 1991; Locklear, 2014; Joiner, Perez, Wagner, Berenson, & Marquina, 2001; Phillips, 2007; Weller, 1966). Fisher (1991) illustrated this by saying, "As the mountaineer's hopes cracked under the weight of depression, floods, and depleted soil, he came to believe that external forces, not man, control human destiny" (p.187). Fatalistic individuals are characterized focusing on the present and not the future (Greenlee & Lantz, 1993; Lemon, Newfield, & Dobbins, 1993). Thus, Appalachians endure undesirable conditions with little hope for change and little complaining (Fisher, 1991; Weller, 1966).

Fatalism influences many aspects of Appalachian living including how individuals approach their health and health decision-making (Shen, Condit, & Wright, 2009). This feeling of lack of control contributes to Appalachians being more susceptible to depression and makes them less receptive to health promotion efforts (Gulley, 2014; Philips, 2007). The negative impact of fatalism and Appalachian health starts early; Appalachian adolescents are more likely to be fatalistic than other adolescents (Gulley,

2014; Philips, 2007). Indeed, Appalachians' religious behaviors adapted from their fatalism (Fisher, 1991; Weller, 1966).

Appalachia is regarded as a heavily religious area, but their religious groups look negatively upon political and social participation (Fisher, 1991; Weller, 1966). Appalachian religious behaviors, formed from their fatalistic outlook, seek to relieve guilt and illness, but also supply recreational services in areas where they are sparse (Fisher, 1991; Weller, 1966). Religion is so important that individuals weigh not only the potential benefits of medical care, but also their faith when seeking direction for health problems (Behringer & Friedell, 2006).

As opposed to the routine-seeking individuals that frequent America's prosperous regions, Appalachians avoid routines (Fisher, 1991; Weller, 1966). Because these individuals would rather have excitement than stability, people residing in the Appalachian area are not concerned with having a stable job or getting an education (Fisher, 1991; Weller, 1966). Appalachians often spend all of their money on action-seeking pleasure, such as unnecessary luxury items and alcohol (Fisher, 1991; Weller, 1966). Moreland et al. (2013) stated that youth living in rural areas are more likely to have positive outlooks toward alcohol and perceive its use as less hazardous than teens living in other areas. Youth living in Appalachia exhibit higher levels of adolescent risk taking and engaging in unsafe behaviors (Moreland, Raup-Krieger, Hecht, & Miller-Day, 2013), such as alcohol consumption, tobacco use, drug abuse, and dropping out of school (Burton et al., 2013; Moreland et al., 2013).

Appalachians are also person-oriented, striving to be noticed, liked, and accepted (Fisher, 1991; Weller, 1966). An individual's goals are defined in relation to one's family

and friends. Because group acceptance is so highly valued, ideas presented from an outside entity are taken personally and as criticism, not as an opportunity to dialogue about different perspectives (Fisher, 1991; Weller, 1966). This orientation lends itself to a heavy emphasis on family.

Familism is another cultural indicator of Appalachia. Familism is a social orientation where people put the needs of their family, immediate and extended, ahead of other groups, objects, or even their own interests (Brown & Schwarzweller, 1971; Fisher, 1991; Lewis & Billings, 1997; Montemayor, Adams, & Gullotta, 2000; Moreland et al. 2013). Moreland et al. (2013) found that the idea of familism was so strong that spending time with one's family members was a deterrent to engaging in risky behaviors. However, Fisher (1991) and Looff (1971) believe this close tie to family can inhibit competent communication with non-family members, and is therefore responsible for the prevalence of emotional disorders frequently found in Appalachian children. This leads one to wonder if family interactions and communication influence an individual's attitude on having a mental health disorder and seeking treatment for it.

The strong emphasis on family found in Appalachia heavily contributes to an adolescent's health behaviors (Gulley, 2014). This type of familial structure undermines the individual, his or her self-interest, autonomy, and personal agency (Lewis & Billings, 1997; Montemayor, Adams, & Gullotta, 2000). Belonging to a family in which an individual does not feel valued or included can make an individual feel as if his or her thoughts are not important, which can damage his or her self worth (Hamon & Schrodt, 2012); this can lead to depression (Smokowski et al., 2013). Additionally, families that discuss issues in an open manner are more likely to discuss health issues (Pecchioni,

Thompson, & Anderson, 2006). Appalachians' emphasis on family may be influencing the high levels of depression experienced by their youth. This is why more research on the relationship between family communication styles and depression is needed.

Appalachians are highly isolated and adaptive (Fisher, 1991). Due to the limited access of roads that still plague Appalachia, isolation from other cultures and beliefs still occurs (Fisher, 1991; Weller, 1966). The isolation of Appalachia leads to interesting patterns of migration. Individuals who are intelligent and ambitious often leave the area (Burton et al., 2013; Carr & Kafalas, 2009; Fisher, 1991; Weller, 1966). This brain drain often leaves only the poorly educated, or those satisfied with only achieving the bare necessities, as residents of Appalachia (Fisher, 1991; Weller, 1966). Being poorly educated can not only affect their job prospects, but other areas of their lives, such as health.

Studies of Appalachian youth found that nutrition, depression, and suicide are three overarching trends found in their high school student population (Summers & Leary, 2002). A reported 90% of suicide victims have at least one co-morbidity (in this case, mental health disorders), and less than half of the individuals met with a mental health provider within the year prior to their death (Renaud, 2014). Additionally, Fontanella et al. (2015) reported that rates for adolescent suicides in rural areas are doubled of those from urban areas. Lorenz, Wickrama, and Yeh (2004) reported similar findings for adults in rural areas; while urban areas are exhibiting declines in suicide, rural areas are seeing increases. While these statistics are about rural populations in general and not Appalachia specifically, they still provide a good starting point for understanding mental health in Appalachia.

According to a 2010 Gallup Poll, Appalachia represents 54% of America's most highly depressed metro regions (Crabtree, 2011), and individuals living in the Appalachian counties are known for a high risk for depression (Smokowski, Evans, Cotter, & Guo, 2014; Zullig & Hendryx, 2011). More specifically, individuals living in the coalmining areas of Virginia, Tennessee, Kentucky, and West Virginia reported the lowest scores of wellbeing on a National Gallop poll (Hendryx & Innes-Wimsatt, 2013). Furthermore, individuals living in areas where coal mining is heaviest are at greater risk for major depression than other parts of Appalachia or the United States as whole (Zullig & Hendryx, 2011). Peden, Reed, and Rayens (2005) studied depressive symptoms in adolescents residing in rural areas and reported that 34% of their participants reported symptoms, which is 23% higher than the national average. Similarly, a study examining depression in Appalachian homes found that 33% of respondents report that them or someone in their household was battling depression (Huttlinger, Schaller-Ayers, & Lawson, 2004).

Burton et al. (2013) reported that Appalachian men are more likely to commit suicide and women have depressive symptoms double that in urban areas. In general, low-income rural children also have a higher incidence of psychiatric disorders, most notably depression (Costello, Keeler, & Angold, 2001). Peden, Reed, and Rayens (2005) studied depressive symptoms in adolescents residing in rural areas and reported that 34% of their participants reported symptoms; which is 23% higher than the national average. Lee, Friesen, Walker, Colman, and Donlan (2014) suggested adolescents may benefit from a mental health peer-support groups, but lists the lack of family-level factors, such as resources to access care and accessibility of health care, as a limitation.

Smokowski et al. (2014) brings to focus the need for more studies on rural youth and depression, calling for research surrounding the issues of rural Appalachian areas and depression. Smokowski et al. (2014) stated that most research does not focus on rural areas or youth, and certainly not pairing the latter two together: Appalachian culture is characterized by high depression and suicide rates, fatalism, and familism. By assessing the traditions of Appalachia, it is clear that certain cultural beliefs and practices may be contributing to the high levels of depression present in the area. However, more research is needed. Through these factors it becomes apparent how enlightening a study combining the Appalachian culture, health communication, and family communication would be.

Depression

According to the National Institute of Mental Health (NIMH; 2012b, 2015), depression is a common yet serious mental illness typically indicated by sad or anxious feelings that interfere with daily activities and interactions (NIMH, 2015). NIMH (2012a) reported that 11% of juveniles have a depressive disorder by the age of 18. Exposure to stressful life experiences increases the chance of depression in youth (Taylor et al., 2014). NIMH (2015) recognizes six different types of depressive disorders: major depression, persistent depressive disorder, psychotic depression, postpartum depression, seasonal affective disorder, and manic-depressive illness. Major depression, as defined by NIMH (2015), includes severe symptoms that interfere with an individual's ability to eat, sleep, work, and enjoy life. An individual may also encounter major depression only once in his or her life, but is more likely to have multiple episodes of major depression (NIMH, 2015). Persistent depressive disorder has similar effects on an individual's life; however,

persistent depressive disorder is characterized by a depressed mood that lasts for a minimum of two years (NIMH, 2015).

There are three types of depression that may develop as a result of unique circumstances. Psychotic depression, according to NIMH (2015), is a form of depression that occurs in tandem with a form of psychosis, like hallucinations. Depression can also be associated with childbirth. As estimated 10-15% of women experience postpartum depression (NIMH, 2015). This type of depression is triggered by the hormonal, physical, and overwhelming changes associated with childbirth. Seasonal affective disorder (SAD) is a variation of depression caused by seasonal changes. Usually, individuals with SAD experience higher levels of depression in the winter with better moods associated with spring and summer (NIMH, 2015). The last type of depression is manic-depressive illness, also known as bipolar disorder. According to NIMH (2015), manic-depressive disorder is a cycle of mood changes. These cycles consist of extreme peaks in moods followed by extreme lows (NIMH, 2015).

While many types of depression can be recognized and diagnosed, what causes depression is not as clear. NIMH (2012a, 2012b, 2015) stated that depression is most likely caused by a combination of biological and social factors. Common social and biological factors include parental influence, perceived parental and social support, genetics, the environment, socio-economic status, and culture.

A parenting style characterized by low care and high control was associated with depression (McGinn, Cukor, & Sanderson, 2005). McGinn, Cukor, and Sanderson (2005) reported that adolescents who rate their parents as being neglectful report higher levels of depressive symptomology. Similarly, Acun-Kapikiran, Korukco, and Kipikiran (2014)

claimed that parental pressure and parents making decisions for youth contribute to the likelihood of depressive symptoms occurring. Depressed youth are often seen as more suicidal, violent, and less competent in a school setting than other youth (Romer & Bock, 2008). However, Wang and Sheikh-Khalil (2014) found that adolescents with involved parents, parents that attended school events or often communicated with teachers, were more likely to have higher academic and emotional functioning.

Another commonly cited cause of depression is a low perception of social support (Lorenz, Wickrama, & Yeh, 2004). Individuals who perceive low levels of familial support are more likely to express higher levels of depressive symptoms (Brausch & Decker, 2013; Galambos, Leadbeater & Barker, 2004; Khatib, Bhui, & Stansfeld, 2013; Murberg, 2009; Sheeber, Hops, Alpert, Davis, & Andrews, 1997; Stice, Ragan, & Randall, 2004). Conversely, adolescents who perceived higher levels of paternal support exhibit lower levels of depressive symptoms (Anderson, Salk, & Hyde, 2015; Brausch & Decker, 2013) Additionally, Peden, Reed, and Rayens (2005) reported that most rural individuals were close with their families, which was a protective agent against depressive symptoms. However, Lee et al. (2014) reported that in the case of depression, young individuals favor talking to friends, but favor parents or doctors when the issue is Attention-Deficit Hyperactivity Disorder, ADHD. This may have to do with how individuals perceive support.

Individuals between the ages of aged 9-15 most frequently cite parents as being their most supportive figure (Bokhorst, Sumter, & Westenberg, 2010). However, adolescents between the ages of 16-18 perceive friends as being more supportive than parents (Bokhorst, Sumter, & Westenberg, 2010). It should be noted however, that

Bokhorst, Sumter, and Westenberg (2010) do not state that adolescents between the ages of 16-18 perceive low support from parents; adolescents simply perceive to receive more support from friends.

Rice, Harold, and Thapar (2002) stated that adolescents' depression symptoms are highly influenced by genetic factors. Genetic factors were present more frequently in boys, but environmental factors weighed heavily for girls (Rice, Harold, & Thapar, 2002). Weich, Blanchard, Prince, Burton, Erens, and Sproston (2002) found that environment, inside as well as outside of the home, can contribute to an individual's depressive symptoms. The researchers argued that in order to reduce the prevalence of depression, research is needed on both the influences on the personal level and the context in which people live their lives (Weich et al., 2002).

Living in poverty creates additional factors that may contribute to depression and NIMH (2012b) recognized that depression may be caused by stressful situations including poverty. "Poverty creates a context of stress in which stressors build on one another and contribute to further stress" (Wadsworth et al., 2008, p. 157). Thus, living in poverty can lead to additional issues. For example, adolescents from impoverished families are more likely to have psychological problems than individuals who come from a wealthier home (Early, 1992; McLoyd, 1990; Samaan, 2000). Additionally, adolescents from impoverished families rate much higher on self-reported depression than wealthier adolescents (Tilleczek, Ferguson, Campbell, & Lezeu, 2014; Willms, 2009).

Living in rural areas often means geographic isolation, which may further depressive symptomology (Fontanella et al., 2015). In tandem with the isolation of rural areas, poverty fosters an environment with limited access to services and resources to

combat depression (Campbell, Richie, & Hargrove, 2003; Fontanella et al., 2015).

Commonly found accompanying poverty in rural areas is a lack of importance placed on

education (Campbell, Richie, & Hargrove, 2003). Alcohol abuse is prevalent in rural

areas, which may also contribute to depression (Lorenz, Wickrama, & Yeh, 2004).

Researchers comparing rural and urban adult living environments have reported

that adults in rural areas experienced higher rates of depression, but few studies have

studied depression in rural adolescents (Smokowski et al., 2014). Peden, Reed, and

Rayens (2005) found that in rural areas that girls and boys reported equal depressive

symptoms. This means that one sex is not more depressed than the other. Peden et al.

(2005) did not find depression linked to socioeconomic status, but did find it linked to

negative perceptions of school and personal experiences (such as shootings, stabbings,

assault, smoking, and drinking).

Weed, Morales, and Harjes (2013) argued that the environmental factors should

be expanded to include culture because it plays a large role in depression for adolescents.

Samaan (2000) reported that individuals' cultural beliefs heavily influence their beliefs

and decision-making about mental illness and treatment. Family communication is a big

part of how Appalachian culture is transmitted, thus it needs to be examined.

Family Communication

In order to understand family communication, family must be defined. Floyd,

Mikkelson, and Judd (2006) identify three different lenses to define families: the

sociolegal lens, the biogenetic lens, and the role lens. First, the sociolegal lens defines

family by their legally sanctioned status. Second, the biogenetic lens classifies families

according to their shared genes. Last, the role lens identifies families by patterns of communication and interaction. Each will be discussed further below.

The sociolegal lens definition of family, as explained by Floyd et al. (2006), defines a family as a relationship status that carries legal recognition. It is often utilized because of the simple standardization that occurs when used. This lens fails to recognize some familial ties that occur such as stepsiblings and other non-legally recognized living arrangements such as a child being raised by extended family.

According to the biogenetic model, individuals are only considered a family if they share genetic material or have a potential for reproduction (Floyd et al., 2006). This lens is considered the most simplistic and narrow. However, the biogenetic lens does not take into account any type on non-genetic relationship two individuals may have (Floyd et al., 2006). Additionally, due to the procreative focus of this lens, individuals in the LGBT/Q community are not included even though they may have children. Additionally, this narrow outlook on family does not include the complex familial structures including adoption, foster care, and legal guardianship that are often found in the Appalachian area. According to the Population Reference Bureau (2004), approximately 31% of Appalachian households are nonfamily homes, which includes individuals living with nonrelatives.

According to the role lens (Floyd et al., 2006), families are formed through communication, thus understanding family communication is key to understanding family membership and family relationships (Vangelisti, 2012). Complimentary to Floyd et al. (2006), Miller-Day (2011) defined a family as "a group of persons who interact and through their interactions constitute a family identity" (p. 3). Additionally, "whether the

group of people function as a family; do they share affection and resources, think of one another as family members, and present themselves as such to neighbors and others" (Minow, 1998, p. 8)? It is through communication that individuals come together to create their family identity (Kendall, 2007; Vangelisti, 2012) and to express their familial ties (Galvin, 2006; Minow, 1998). As stated previously, 31% of Appalachian households are nonfamily homes (PRB, 2004); because the role lens is the broadest and most encompassing of the three lenses (Floyd et al., 2006) it will be used to define family for this study. Thus, it is not just the immediate family that influences the lives of individuals, it is anyone who is considered family or is fulfilling the role of a family member.

A family's effect on the health decision-making process is huge (Baiocchi-Wagner, 2015). According to Kreps, O'Hair, and Clowers (1994), any individual considered significant, such as parents and family members, can engage in conversations that lead to positive health choices. These interactions directly and indirectly influence the health decision-making process (Baiocchi-Wagner, 2015; Klein, 2004; Pecchioni, Thompson, & Anderson, 2006). Baiocchi-Wagner (2015) argued that these influences occur in everyday family interactions. These interactions have the ability to not only encourage positive and negative change, but also maintain currently existing health behaviors (Baiocchi-Wagner, 2015).

Family communication can also influence other areas of an individual's health, such as knowledge and support. According to Lewis et al. (2014), in comparison to their children, parents are unable to accurately report signs and symptoms of depression in their child, which may be due to a lack of communication or medical knowledge. Without

having the appropriate knowledge about a topic, it is much more difficult for parents to show support. As Jane-Llopis et al. (2011) stated, parental support is important because it can improve mental wellbeing. The communication of this support, along with general conversations surrounding mental health, is key.

The idea that Appalachian individuals rely heavily on family relationships presents the idea that important health messages could be given to youth by parental figures. Appalachian community values the influence the health decisions individual community members make (Behringer & Friedell, 2006; Moreland et al., 2013). Hamon and Schrodt (2012) found that in Southern U.S. undergraduate students, there was no evidence to suggest that parenting styles, measured by Buri's (1991) Parental Authority Questionnaire, regulate the relations between family conformity and young adults' depression, measured by the Center for Epidemiological Studies Depression Scale (Radloff, 1977) . However, in families where youth are expected to follow their parents' beliefs and attitudes without question are slightly more likely to experience depression (Hamon & Shrodt, 2012). Hamon and Shrodt (2012) did not take into account cultural factors.

Revised Family Communication Pattern Theory**. In recent years, the Revised Family Communication Pattern (RFCP) has been established as a reliable and valid means for studying family communication (Koerner & Fitzpatrick, 2002b). The RFCP has been used to study the relationship between family communication and a variety of factors, such as religiosity (Fife, Nelson, & Messersmith, 2011), communication apprehension (Elwood & Schrader, 1998), and resilience (Noorafshan, Jowkar, & Hosseini, 2013). To understand the RFCP, knowledge of its history is important. It is also

imperative to understand how the RFCP will be used for this study, how it will contribute to the theory and existing literature, and how this theory relates to the scholarship of health communication.

Mcleod and Chaffee (1972) created a model called Family Communication Patterns (FCP, Fitzpatrick, 2004; Fitzpatrick & Ritchie, 1994; Moschis, 1985; Ritchie & Fitzpatrick, 1990). The FCP model emerged during a study on political socialization by Chaffee, McLeod, and Wackman (1966). The FCP was created to explore perceptions of family norms. The first studies utilizing the FCP studied a child's use of media in relation to family, and the FCP was used for that purpose throughout the 1970s and 1980s (Fitzpatrick, 2004).

The FCP has two dimensions in the model: socio-orientation and concept-orientation (Fitzpatrick & Ritchie, 1994; Mcleod & Chaffee, 1972). Being socio-orientated is a preference for harmonious social relationships. The socio-oriented family focuses on having children get along and avoiding arguments. Being concept-orientated is a preference for ideas over relationships (Fitzpatrick & Ritchie, 1994; Mcleod & Chaffee, 1972). A concept-oriented family places emphasis on discussing ideas and exposing children to multiple sides of an issue.

The FCP's two orientations were measured by 10-15 items on a Likert scale. The Likert scale ranges from 1- "Strongly Disagree" to 5- "Strongly Agree." Participants have the ability to score either high or low in the two categories (Fitzpatrick & Ritchie, 1994; McLeod & Chaffee, 1972). This creates a 2x2 table in which there are four possible outcomes: pluralistic, consensual, laissez-faire, and protective families (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b).

After observing multiple inconsistencies, Ritchie presented a paper at the annual 1988 meeting of the Association for Education in Journalism and Mass Communication that reinterpreted socio- and concept- orientations (Fitzpatrick & Ritchie, 1994). Ritchie (1991) later empirically validated these findings and redefined the orientations into the ones known and used today; this reinterpretation of the Family Communication Pattern Instrument became known as the Revised Family Communication Pattern Instrument.

Ritchie (1988, 1991) reconstructed concept-orientation to conversation orientation. Conversation orientation is "the degree to which families create a climate in which all family members are encouraged to participate in unrestrained interaction about a wide array of topics" (Koerner & Fitzpatrick, 2002a, p. 85). Ritchie (1988, 1991) also restructured socio-orientation to conformity orientation. According to Koerner and Fitzpatrick (2002a), conformity orientation "refers to the degree to which family communication stresses a climate of homogeneity of attitudes, values, and beliefs" (p. 85).

Similar to the FCP, the RFCP's two orientations are rated on an instrument with 10-15 items on a Likert scale. The Likert scale ranges from 1- "Strongly Disagree" to 5- "Strongly Agree." Participants have the ability to score either high or low in the two categories (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b). Although the names and definitions of the orientations changed, the use of the new scale generates the same 2x2 table in which there are four possible outcomes: pluralistic, consensual, laissez-faire, and protective families (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b).

A pluralistic family is composed of a high conversation orientation and low conformity orientation (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b). According to Koerner and Fitzpatrick (2002b), these families are characterized by open, unconstrained discussion and emotional supportiveness. Parents of these families are not individuals who feel the need to be in control of their children. Children of pluralistic families tend to be independent and value family conversations. This leads the children to be most influenced by rational arguments and messages (Koerner & Fitzpatrick, 2002b).

A family that exhibits both high conversation and conformity orientations is classified as a consensual family (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b). Koerner and Fitzpatrick (2002b) explained that consensual families place value in their hierarchical structure, thus parents should make decisions about the family. However, these families also value open communication and believe children should have a say. Parents resolve this tension by using their open communication to explain their decision-making processes to the children. Children from these families are likely to adopt their parents' beliefs, follow similar messages, and stray away from messages that oppose their parents' beliefs (Koerner & Fitzpatrick, 2002b).

Families located in both low conversation and low conformity orientations are labeled as laissez-faire families (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b). Laissez-faire families are characterized by few, uninvolved interactions among family members. Koerner and Fitzpatrick (2002b) argued that parents of these families believe each individual is responsible for their own actions and that parents should not dictate decisions to the family. The parents also do not place value in communicating

with their children. Due to this hands-off approach, children of these families are highly influenced by peers and messages from outside the home (Koerner & Fitzpatrick, 2002b).

Lastly, individuals from a low conversation orientation and high conformity conversation are members of a protective family (Fitzpatrick & Ritchie, 1994; Koerner & Fitzpatrick, 2002b). Protective families, according to Koerner and Fitzpatrick (2002b), are characterized by an emphasis on obedience. Parents of these families feel the need to make decisions for the family and the children, and do not value explaining these decisions to the children. Because of this, children do not trust their own decision-making ability and are easily motivated by outside authorities (Koerner & Fitzpatrick, 2002b).

Summary and Hypotheses

Hamon and Schrodt (2012) studied the relationship between the RFCP and self-esteem and depression. Pluralistic families tend to produce adolescents whom report higher levels of self-esteem and lower depressive symptoms than youth from the other types of families (Hamon & Schrodt, 2012). Hamon and Schrodt (2012) continued, explaining "there may be something unique about the role of a family conversation orientation in building children's self esteem and in reducing the likelihood that children will experience depression as young adults" (p. 163). Families who partake in conversations that include emotional content may protect youth from depressive symptom development (Klimes-Dougan & Zeman, 2007; Luebbe & Bell, 2014). These exchanges are more likely to be found in families who exhibit high levels in the conversation orientation because it is associated with holding open conversations with family members (Koerner & Fitzpatrick, 2002b).

The Revised Family Communication Pattern model will act as the theoretical perspective to guide the proposed study. This model will be used to not only to inform this study but the RFCP instrument by Koerner and Fitzpatrick (2002b) will be used to measure conversation orientation (15 items) and conformity orientation (11 items) in families. The Revised Family Communication Pattern instrument has been applied and tested in many studies that range from conflict and conflict resolution (Koerner & Fitzpatrick, 1997), prediction of young male's identity (Soltani, Hosseini, & Mahmoodi, 2013), religious orientations among college students (Fife, Nelson, & Messersmith, 2014), and locus of control, self-esteem, and shyness in adolescents (Farahati, 2011). Interestingly there is little research linking the RFCP to the genre of health communication besides the work by Hamon and Schrodt (2012). It is at this cross section that this study will advance the RFCP model as well as bridge the gap between family communication and other genres.

For Study 1, the RFCP will be used to determine the relationship between the RFCP orientation and depressive symptomology. In addition, this study will test new measures of instructive mediation by parents, teachers and peers to determine whether additional research targeting specific populations is needed. Thus, the following hypotheses will be explored in a college population to see if these variables are related:

H1: Conformity orientation in college students is related to the expression of depressive symptomology.

H2: Conformity orientation in college students is related to the likeliness of students to talk to their peers about depression.

H3: Conversation orientation in college students is related to the likeliness of students to talk to

their parents about depression.

H4: Communication orientation is related to a students' likelihood of talking to

teacher about depression.

CHAPTER 2: STUDY ONE

Study one takes place in a large Southeastern mid-Atlantic university that has

approximately 19,000 undergraduate students and approximately 1,700 graduate students

enrolled (U.S. Department of Education, 2015). A total of 325 college students completed

the survey. After deleting incomplete data sets (19 responses), 306 responses were

included in the analysis. The sample was composed of 82 males (26.80%) and 221

females (72.20%), which is slightly higher than the university's gender percentage of 60

% women and 40% men (Usnews.com, 2016). The average age of participants was 18.72

(SD=3.42). The sample consisted of 275 (89.90%) first-year students, 11 (3.60%)

sophomores, 10 (3.30%) juniors, and 7 (2.30%) seniors. A majority of students ($n = 256$;

83.70%) reported living in a two-parent home. Thirty-eight (12.40%) students reported

living in a single-parent home and two participants reported living with a guardian

(0.70%). Seven students selected "other" (2.3%), which included living arrangements

with spouses, stepfamily situations, extended families combined with a single parent, and

divorced parent homes.

Procedure

After obtaining Institutional Review Board approval (see Appendix A), the

researcher recruited a convenience sample of participants by issuing a call for

participation on SONA, the communication department research pool. SONA is an online

system that helps facilitate research studies and tracks student participation without tying

students' names to the actual study. Students see the study description listed on the site

and can choose which studies to complete. These students could choose to participate in

the online survey for one out of five required research credits. Additionally, a brief description of the study and a link to the survey were available on the researcher's Facebook page. Data for the study were collected using Qualtrics, an online survey software.

The participants were asked to provide answers to a series of questions related to their family's communication styles and their worldviews. The survey took an average of 17 minutes to complete. Participation was entirely voluntary. Participants were allowed to withdraw without consequences of any kind. However, once responses were submitted and anonymously recorded, participants were not able to withdraw from the study. All responses were anonymous, and upon completion of the study, all information will be destroyed.

Measures

The study will use pre-existing scales supported by previous research. The Revised Family Communication Pattern (RFCP) instrument and the Quick Inventory of Depressive Symptomatology Self-Report (QIDS-SR16) have been used numerous times and tested for validity and reliability. The RFCP (Koerner & Fitzpatrick, 2002b) was used to measure an individual's family's communication orientation. The QIDS-SR16 (Rush et al., 2003) was used to measure depressive symptoms in participants. Lastly, a loosely adapted Instructive Mediation scale (Valkenburg, Krcmar, Peeters, & Marseille, 1999) was used to measure how adolescents are talking to their parents, peers, and teachers.

Revised Family Communication Pattern Instrument. The RFCP helps determine whether families are conformity or conversation oriented. Responses were

recorded on a Likert-type scale ranging from strongly disagree (coded as a 1) to strongly

agree (coded as a 5). According to Koerner and Fitzpatrick (2002a), conformity

orientation "refers to the degree to which family communication stresses a climate of

homogeneity of attitudes, values, and beliefs" (p. 85). The conformity subscale

(M=37.57, SD = 6.81) had a Cronbach's alpha of .78 a range of 14-55, and included

questions such as "When anything really important is involved, my parents expect me to

obey without question." Conversation orientation is "the degree to which families create

a climate in which all family members are encouraged to participate in unrestrained

interaction about a wide array of topics" The conversation orientation subscale

(M=51.82, SD = 10.75) had a Cronbach's alpha of .89, had a range of 19-75, and

included such questions as "In our family we often talk about our feelings and emotions"

(Koerner & Fitzpatrick, 2002a, p.85) (see Appendix B). In recent years, the Revised

Family Communication Pattern (RFCP) has been established as a reliable and valid

means of linking family communication to a plethora of dependent variables (Koerner &

Fitzpatrick, 2002b). For all of the proposed hypotheses, communication orientation, as

defined and determined by the RFCP, will function as the predictor variable.

  Quick Inventory of Depressive Symptomatology Self-Report. The Inventory of

Depressive Symptomology (IDS) is a 30-item instrument used to measure the severity of

depressive symptoms (ids-qids.org, 2014). The Quick Inventory of Depressive

Symptomatology Self-Report (QIDS-SR16) is a 16-item self-reporting instrument

adapted from the IDS. QIDS-SR16 was used to measure depressive symptoms in

participants. According to Bernsetin et al. (2010), in comparison to the Children's

Depressive Rating Scale –Revised (CDRS-R), QIDS-SR is equally reliable, more cost-

effective, and lacks parental input, making it truly self-reporting in all situations. Cronbach's alpha for the QIDS scale ($M = 15$, $SD = 4.14$) was .75, had a range of 9-30 and evaluated for all nine criterion domains that define a major depressive episode: sleep, sadness, mood, appetite/weight, decision-making/concentration, self view, thoughts of death or suicide, energy level, general interest, and restlessness/agitation (Bernstein et al, 2014; 2014; IDS and QIDS, 2014; Rush et al, 2003) (see Appendix B). For the first proposed hypotheses, depressive symptomology is the dependent variable.

Instructive Mediation. Last, a loosely adapted scale from Valkenburg, Krcmar, Peeters, and Marseille (1999) measures instructive mediation on three levels. Instructive mediation is a process in which parents discuss certain topics, traditionally through explanations. This scale was used to evaluate the description of depression to individuals from a parental, previous high school staff, and peer level. Statements such as "How often do your parents or guardians explain what depression is" were ranked from never to very often and were asked for parents, school staff, and peers (see Appendix B). The parents talking subscale ($M = 3.71$, $SD = 2.4$) had a Cronbach's alpha of .97, an average range of 1-10, and included such items such as "My parents talk about what depression is." The teachers talking subscale ($M = 3.98$, $SD = 2.4$) had a Cronbach's alpha of .98, an average range of 1-10, and included such items such as "My teacher talks about the symptoms of depression." The peers talking subscale ($M = 4.05$, $SD = 2.31$) had a Cronbach's alpha of .97, an average range of 1-10, and included such items such as "My peers talk about the different types of depression." This scale was used to measure the dependent variables in Hypotheses 2-4.

Results

Hypothesis 1 examined whether there was a relationship between a high conformity orientation and the likeliness of students expressing depressive symptomology. A two-tailed Pearson's correlation coefficient was used to test this. There was a significant positive correlation between coming from a high conformity home and the likelihood of high depressive symptomology $r(304)=.23$, $p=.0005$. Thus, Hypothesis 1 was supported. See Table 1.

Hypothesis 2 examined whether a there was a relationship between a high conformity orientation and the likelihood of students talking to their peers about issues like depression. A two-tailed Pearson's correlation coefficient was used to test this. There was a significant positive correlation between coming from a high conformity orientation home and a student's likelihood to talk to peers $r(304)=.15$, $p=.012$. Thus, Hypothesis 2 was supported. See Table 1.

Hypothesis 3 examined if a high conversation orientation was correlated to the likelihood of students to talk to their parents about depression. To test this, a two-tailed Pearson's correlation coefficient was utilized. There was a significant positive correlation between coming from a high conversation orientation home and that student's likelihood to talk to parents $r(304)=.17$, $p=.004$. Therefore, Hypothesis 3 was supported. See Table 1.

Hypothesis 4 claimed communication orientation was related to the likelihood of students to talk to teachers. Two two-tailed Pearson's correlations analyses were conducted. A high conversation orientation did not significantly correlate to the likelihood of students talking to teachers. Additionally, students coming from a high

conformity orientation home did not have a significant relationship to the likelihood of that student talking to teachers. Thus, Hypothesis 4 was not supported. See Table 1.

Table 1
Summary of Correlations and Descriptive Statistics of Study 1(N=306)

Variables	1	2	3	4	5	6
1. Conversation Orientation	-					
2. Conformity Orientation	-.41****	-				
3. Talking to Parents	.29****	-.08	-			
4. Talking to School Staff	.11	-.01	.35****	-		
5. Talking to Friends	.03	.14*	.46****	.47****	-	
6. Depressive symptomology	-.23****	.23****	.09	.03	.17**	-
M	3.56	2.98	3.71	3.98	4.05	16.15
SD	.70	.65	2.40	2.42	2.31	4.14

Note: *N*= 306.
*p<.05, **p<.01, ***p<.001, ****p<.0005

Study One Discussion

As a whole, the findings of this study contribute to the amount of knowledge available on conversations surrounding depression and the likelihood of depression in college.

As originally hypothesized, coming from a conformity-oriented home in which one is not free to speak his/her opinion is significantly correlated with higher levels of depressive symptomology. This may be because individuals from a conformity home do

not feel comfortable discussing their problems with parents, and are not receiving the support or professional help necessary for feeling better. Thus, parents can and should be aware about how they speak to their children and the possible consequences of such styles of communication. Parents need to recognize that while conformity may seem easier and may be more beneficial in some areas, coming from a home in which there is low family connectedness or a conformity orientation home may lead to greater emotional distress (Topham et al., 2011). Additionally, the data suggest that having a high conformity orientation is related to the likelihood of college students having conversations with peers about depression rather than calling their parents for emotional support.

Students from a home with a conversation orientation were found to have parental figures that often talk about depression, its symptoms, and resources for those with depression. As the data suggest, students whom already live in an environment in which openness and individuality are encouraged, it may be easier to begin a conversation surrounding mental health. While it cannot be said that conversation-oriented homes do not have depressed individuals because these conversations are happening, individuals may be receiving more support from their family or seeking help from professionals. Those students may report lower depressive symptomology because of this, while individuals from conformity homes are not receiving the help or support they need. Thus, they may be reporting higher levels of depressive symptomology.

Surprisingly, neither conversation nor conformity orientation is related to how often students have conversations with teachers and depression and its effects. This is

alarming due to the amount of hours college and high school students spend in a school setting.

Limitations

One limitation of this study includes a lack of diversity in the sample. First, most of the participants were white and from two-parent homes. Additionally, most participants, like the school as a whole, were female. Also, because the survey was listed in the basic course research pool, most respondents were first year students at the university. A final limitation was the limited perspective provided by the self-reporting measures used. The RFCP may have provided additional information had participants' parents also been asked to participate.

While Study 1 provided a great foundation for the main study, a majority of participants in Study 1 did not come from an Appalachian background. Also, males and females were not equally represented. To truly understand how Appalachian family communication patterns influences adolescents, it is important that Study 2 is truly, and fully, immersed in Appalachia. To achieve this, Study 2 focuses solely on individuals who reside in that area.

As the literature review in Chapter One presented, there is research supporting the connection between Appalachia (Burton, Lichter, Baker, & Eason, 2013; Fisher, 1991), depression (NIMH, 2012a; NIMH, 2012b; NIHM, 2015), and family support and communication on depression (Olsson, Nordström, Arinell, & von Knorring, 1999); however, there is no research on Appalachian's family communication and its relation to the prevalence of depression. The gap that exists in the literature and the data from Study 1 has led to the following hypotheses for Study 2:

H1: Students who have a high conformity orientation are more likely to have high

    depressive symptomology.

H2: Students who have a high conformity orientation are more likely to talk to

    their peers about depression.

H3: Students who have a high conversation orientation are more likely to talk to

    their parents about depressive symptomology.

H4: Communication orientation is related to a students' likelihood of talking to

    teacher about depression.

H5: Demographic factors, family composition status, communication orientation,

    talking with parents, talking with teachers/school staff, and talking with peers about

    depression predicts an individual's depressive symptomology.

CHAPTER 3: STUDY TWO

Study two takes place in two Appalachian high schools. The Virginia high school had 742 students enrolled in the 2015-2016 school year, and the North Carolina high school reported 942 students enrolled in the 2015-2016 school year. A total of 169 high school students completed the survey. All responses were included in the analysis. The sample was composed of 82 males (49%) and 87 females (51%). The average age of participants was 14.78 (SD=1.4). The sample consisted of 39 eighth-grade students (23%), 40 ninth-grade students (24%), 40 tenth-grade students (24%), 29 eleventh-grade students (17%), and 21 twelfth-grade students (12%). A majority of students ($n = 115$; 68%) reported living in a two-parent home. Thirty-five (21%) students reported living in a single-parent home and ten (6%) participants reported living with a grandparent or other relative. Eight students selected "other" (5%), which included living arrangements with stepfamily situations, extended families combined with a single parent, and divorced parent homes.

Procedure

Due to the relevance of information being gathered, a purposeful sample was used. The sites of the study were public high schools located in rural Appalachia. After obtaining Institutional Review Board approval (See Appendix A), high school principals were contacted by the researcher to discuss the study. The researcher and principals discussed the research protocol, including the consent process, participant confidentiality, and the procedure for completing questionnaires over the 2015 summer break. Principals of the high schools signed a site consent form, confirming the allowed presence of the

researcher on their school property to collect data. During these meetings it was decided that all individuals enrolled in the schools would be eligible for the study and be prompted with parental consent and youth assent forms. Due to the small samples located within these high schools, randomization was not used to distribute surveys to students; instead all eligible individuals were asked to participate.

Selected schools sent parental consent forms home in August of 2015 along with the school's required paperwork. Students were told that their participation was voluntary, and could refuse to complete, quit at any time, or skip an item on the day of the survey. If the researcher received a signed parental consent form, students were called to their schools' computer lab. Students were checked into the computer lab and were asked to read and accept an online youth assent form. Information that contained identifying data (e.g., consent forms) is being kept in a file cabinet located in the researcher's office to ensure participants' confidentiality. The survey was an anonymous, online questionnaire, self-administered in the presence of the researcher, and sometimes school personnel. Data for the study were collected using Qualtrics, an online survey software.

The participants were asked to provide answers to a series of questions related to their family's communication styles and their worldviews. The survey took an average of 48 minutes to complete. Participation was entirely voluntary. Participants were allowed to withdraw without consequences of any kind. However, once responses were submitted and anonymously recorded, participants were not able to withdraw from the study. All responses were anonymous, and upon completion of the study, all information was destroyed.

Measures

Similar to Study 1, Study 2 used pre-existing scales supported by the previous research in Study 1. The Revised Family Communication Patterns (RFCP) instrument (Koerner & Fitzpatrick, 2002b) was used to measure an individual's family's communication orientation. The Quick Inventory of Depressive Symptomology Self Report (QIDS-SR16, Rush et al.., 2003) was used to measure depressive symptoms in participants. Lastly, a loosely adapted Instructive Mediation scale (Valkenburg et al., 1999) was used to measure how adolescents are talking to their parents, peers, and teachers.

Revised Family Communication Pattern Instrument. The RFCP helps determine whether families are conformity or conversation oriented. Responses were recorded on a Likert-type scale ranging from strongly disagree (coded as a 1) to strongly agree (coded as a 5). According to Koerner and Fitzpatrick (2002a), conformity orientation "refers to the degree to which family communication stresses a climate of homogeneity of attitudes, values, and beliefs" (p. 85). The conformity subscale (*M*=3.42, *SD* = .62) had a Cronbach's alpha of .78, a range of 16-50, and included questions such as "When anything really important is involved, my parents expect me to obey without question." Conversation orientation is "the degree to which families create a climate in which all family members are encouraged to participate in unrestrained interaction about a wide array of topics" The conversation orientation subscale (*M*=3.45, *SD* = .72) had a Cronbach's alpha of .89, a range of 12-48, and included such questions as "In our family we often talk about our feelings and emotions" (Koerner & Fitzpatrick, 2002a, p.85) (see Appendix C). In recent years, the Revised Family Communication Pattern (RFCP) has

been established as a reliable and valid means of linking family communication to a

plethora of dependent variables (Koerner & Fitzpatrick, 2002b). For all of the proposed

hypotheses, communication orientation, as defined and determined by the RFCP, will

function as the predictor variable.

Quick Inventory of Depressive Symptomatology Self-Report. The Inventory of

Depressive Symptomology (IDS) is a 30-item instrument used to measure the severity of

depressive symptoms (ids-qids.org, 2014). The Quick Inventory of Depressive

Symptomatology Self-Report (QIDS-SR16) is a 16-item self-reporting instrument

adapted from the IDS. QIDS-SR16 was used to measure depressive symptoms in

participants. According to Bernsetin et al. (2010), in comparison to the Children's

Depressive Rating Scale –Revised (CDRS-R), QIDS-SR is equally reliable, more cost-

effective, and lacks parental input, making it truly self-reporting in all situations.

Cronbach's alpha for the QIDS scale ($M = 16.37$ $SD = 4.77$) was .78, a range of 9-30, and

evaluated for all nine criterion domains that define a major depressive episode: sleep,

sadness, mood, appetite/weight, decision-making/concentration, self view, thoughts of

death or suicide, energy level, general interest, and restlessness/agitation (Bernstein et al,

2014; 2014; IDS and QIDS, 2014; Rush et al, 2003); (see Appendix C). For the first

proposed hypotheses, depressive symptomology is the dependent variable.

Instructive Mediation. Last, a loosely adapted scale from Valkenburg, Krcmar,

Peeters, and Marseille (1999) measures instructive mediation on three levels. Instructive

mediation is a process in which parents discuss certain topics, traditionally through

explanations. This scale was used to evaluate the communication about of depression to

individuals from a parental, previous high school staff, and peer level. Statements such

as "How often do your parents or guardians explain what depression is" were ranked from never to very often and were asked for parents, school staff, and peers (see Appendix C). The parents talking subscale ($M = 2.62$, $SD = 1.96$) had a Cronbach's alpha of .94, an average range of 1-10, and included such items such as "My parents talk about what depression is." The teachers talking subscale ($M = 2.67$, $SD = 1.96$) had a Cronbach's alpha of .96, an average range of 1-10, and included such items such as "My teacher talks about the symptoms of depression." The peers talking subscale ($M = 2.61$, $SD = 1.94$) had a Cronbach's alpha of .95, a range of 1-9.9, and included such items such as "My peers talk about the different types of depression." This scale was used to measure the dependent variables in Hypotheses 2-4.

Results

Hypothesis 1 examined whether students who have a high conformity orientation are more likely to have high depressive symptomology. A one-tailed Pearson's correlation coefficient was used to test this. There was a significant positive correlation between coming from a high conformity home and the likelihood of high depressive symptomology $r(167)=.18$, $p=.01$. Thus, Hypothesis 1 was supported. See Table 2.

Hypothesis 2 examined whether students who have a high conformity orientation are more likely to talk to their peers about issues like depression. A one-tailed Pearson's correlation coefficient was used to test this. There was not a significant positive correlation between coming from a high conformity orientation home and a student's likelihood to talk to peers. Thus, Hypothesis 2 was not supported. See Table 2.

Hypothesis 3 examined if students who have a high conversation orientation are more likely to talk to their parents about depression. To test this, a one-tailed Pearson's

correlation coefficient was utilized. There was a significant positive correlation between coming from a high conversation orientation home and that student's likelihood to talk to parents $r(167)=.30$, $p<.0005$. Therefore, Hypothesis 3 was supported. See Table 2.

Hypothesis 4 examined if communication orientation is related to a students' likelihood of talking to teacher about depression. Two one-tailed Pearson's correlations coefficients were conducted. A high conversation orientation is significantly correlated to the likelihood of students talking to teachers $r(167)=.19$, $p=.01$. However, students coming from a high conformity orientation home did not have a significant relationship to the likelihood of that student talking to teachers. Thus, Hypothesis 4 was supported. See Table 2.

Table 2

Summary of Correlations and Descriptive Statistics of Study 2 (N=169)

Variables	1	2	3	4	5	6
1. Conversation Orientation	-					
2. Conformity Orientation	-.08	-				
3. Talking to Parents	.30****	.01	-			
4. Talking to School Staff	.19**	-.03	.52****	-		
5. Talking to Friends	.09	.03	.59****	.54****	-	
6. Depressive symptomology	-.44****	.18**	.08	-.04	.28****	-
M	3.45	3.42	2.62	2.67	2.61	16.37
SD	.72	.62	1.96	1.96	1.94	4.77

Note: *N*= 169.
*p<.05, **p<.01, ***p<.001, ****p<.0005

To test hypothesis 5, that sex, age, year in school (block 1), family composition status (block 2), conversation orientation and conformity orientation (block 3) and talking with parents about depression, talking with teachers/school staff about depression and talking with peers about depression predicts one's depression symptomology (block 4), a hierarchical linear regression model was conducted (see Table 3). The first block was not significant. When you add family composition status, the model was significant R^2=.12, ΔR^2=.10, $F(4, 164)$=5.40, p<.0005. Family structure b=1.77, t=4.19, p<.0005 was a significant positive predictor of depressive symptomology. When the two communication orientation variables were added in the third block, the model was also significant and the addition of this block was significant R^2=.28, ΔR^2=.17, $F(6, 162)$=10.61, p<.0005. Family structure b=1.25, t=3.18, p=.002 was a significant positive predictor of depressive symptomology. Conversation orientation b=-2.53, t=-5.55, p<.0005 was inversely related to depressive symptomology. However, conformity orientation b=1.12, t=2.15, p<.03 was a significant positive predictor of depressive symptomology. Last, when the three instructive mediation variables were added in the fourth block, the model was also significant and the addition of this block was significant R^2=.38, ΔR^2=.10, $F(9, 159)$=10.73, p<.0005. Family structure b=1.01, t=42.72, p=.007 was a significant positive predictor of depressive symptomology. Conversation orientation b=-2.79, t=-6.15, p<.0005 was inversely related to depressive symptomology Additionally, with school teachers and staff b=-.47, t=-2.45, p=.015 is inversely related to depressive symptomology. Finally, talking with friends b=.78, t=3.73, p<.0005 was a significant positive predictor of depressive symptomology.

Table 3

Hierarchical Regression Analyses Predicting Depression

	Predictors				
				Block 4 b	
	Block 1 b	Block 2 b	Block 3 b		95% CI
Constant	10.82*	8.80*	14.50**	18.43****	[9.23, 27.63]
Sex	1.11	1.05	0.93	0.60	[-.63, 1.84]
Age	0.30	0.27	0.29	0.06	[-.40, .50]
Grade	-0.13	-0.16	-0.19	-0.11	[-.51, .30]
Family Structure		1.77****	1.25**	1.01**	[.28, 1.75]
Conversation Orientation			-2.53****	-2.79****	[-3.69, -1.89]
Conformity Orientation			1.12*	0.94	[-.02, 1.91]
Parent Talk				0.28	[-.13, .69]
School Talk				-0.47*	[-.85, -.09]
Friend Talk				0.78****	[.37, 1.20]
R^2	0.02	0.12	0.28	0.38	
F	1.22	5.4****	10.61****	10.73****	
ΔR^2	0.04	0.10	0.26	0.34	
ΔF	1.22	17.57****	18.7****	8.16****	

Note: N=164. CI = confidence interval
*p<.05, **p<.01, *** p <.001, **** p <.0005.

CHAPTER 4: DISCUSSION

The current study attempted to examine an extremely prevalent problem in an under-researched community focusing on depression in rural Appalachian adolescents. According to a 2010 Gallup Poll, Appalachia represents 54% of America's most highly depressed metro regions (Crabtree, 2011). Individuals living in the Appalachian counties are known for a high risk for depression (Smokowski, Evans, Cotter, & Guo, 2014; Zullig & Hendryx, 2011). Research has suggested that parents can have a significant, positive or negative, influence on their child's mental well being (Jane-Llopis et al., 2011; NIMH, 2012a, 2012b, 2015). Therefore, the present study attempted to examine the relationship between family communication styles and adolescent depression in Appalachia.

Implications

Hypothesis 1 investigated whether students who have a high-conformity orientation are more likely to have high-depressive symptomology. Survey data indicated that students were more likely to express high-depressive symptomology if their parents used a high-conformity style of communication. Due to the focus of following parental expectations, it may be that conformity oriented families hinder the creation of self-identity and self-concept during the adolescent years. Similar to this, Sartor and Youniss (2002) found that parents who utilize psychological control, such as guilt, hinder the adolescent's emotional development, and encourages development of similarities to the parents. Additionally, Campbell, Adams, and Dobson (1984) stated that "weak affectionate bonding with parents and poor communication levels… are thought to provide an insecure or constricted psychological base for self-exploration"(p.512). This lack of identity creation at an early age, can follow the individual to adult hood. Thus,

depression at this stage of life may increase the likelihood of experience depressive occurrences as an adult.

Hypothesis 2 investigated the likelihood of students from a high-conformity-oriented home talking to their peers about depression. Quantitative data suggested there was no significant relationship between the two variables. While there was a significant relationship with the students in the college sample, Appalachian high school students from highly-conformity-orientated homes do not talk to their peers about depression. Appalachian families' heavy emphasis on familism (Fisher, 1991; Looff, 1971) could contribute to an inability to communicate with non-family members. Because their peers are may likely also be from a conformity-oriented homes, it is possible that none of the students are informed about the issues of mental health or know how to talk to each other. Thus, no catalyst is provided to begin the conversation which may explain the generations of silence in Appalachia. This could be because students are expected to be silent about the issues of mental health. Students learn this from their families. Parents are not talking to children, and children are not talking to each other.

Hypothesis 3 examined students who have a high conversation orientation and if they were more likely to talk to their parents about depressive symptomology. The correlation indicated that the two factors were indeed significantly related. Being able to speak freely to one's parents allows that individual to feel more comfortable discussing mental health. Additionally, individuals who come from high conversation oriented homes are not only likely to talk to their parents, but their teachers and friends, as well. This creates space for individuals to ask for help when they need it. These individuals

then possess the ability to seek services necessary for their betterment of their mental health.

The fourth hypothesis tested if communication orientation was related to a students' likelihood of talking to teacher about depression. First, the data suggested no significant relationship between coming from a high-conformity-oriented home and talking to teachers. However, there was a significant correlation between a high-conversation-oriented home and talking to teachers. The conversations that are occurring may be a result of a higher perceived support from the school staff. This perception of support creates a space of conversation and the possibility of access to resources. Similarly, Wang, Brinkworth, and Eccles (2013) stated positive student-teacher relationships gave more protection to adolescents against depression during the ages of 13-18. Thus, individuals from a conformity orientation do not necessarily perceive the same support as those from conversation oriented homes. Instead of creating a space for help, conformity-oriented individuals' interactions with school staff are sadly creating more barriers of silence.

Lastly, Hypothesis 5 examined a number of variables as predictors of depressive symptomology. Demographics alone did not significantly predict the likelihood of depression in adolescence. When family composition was added to the model, the variance explained becomes significant. Thus, living in a single-parent home, as opposed to a two-parent home, significantly predicts the likelihood of that child developing depressive symptoms during adolescence. This result has supports previous research by Aslund, Nilsson, Starrin, and Sjöberg (2007). Next, family communication orientation was added to the model. Both family orientations were significantly related to likelihood

of depression. Although, conformity orientation was a positive predictor of depressive symptoms, and a conversation orientation was inversely related to the expression of depressive symptomology. Likewise, Dutra et al. (2002) found that a positive relationship between parental-child attachment and communication may increase a child's resiliency. This resiliency may impact an adolescent's susceptibility to depression-like feelings. Thus, families who encourage expression and individualism may be less likely to have an adolescent exhibit depressive symptomology.

Then, instructive mediation was added to the predictive model. Two of the three added variables were shown to be significant. First, talking to teachers was shown to have an inverse relationship with depressive symptomology; students who talk with teachers show less symptoms. This was also found by Wang, Brinkworth, and Eccles (2013). They stated that individuals with a positive relationship with their teacher were more protected again depression during the ages of 13-18. Individuals perceive a teacher's conversation about depression and mental as supportive and caring.

Second, students who talk with peers show more symptoms of depression. This finding supports Wang, Brinkworth, and Eccles (2013). They stated that talking to peers was a positive significant predictor of depressive symptoms. Thus, adolescents who are talking to peers are experiencing more depression. Talking to peers and expression of depressive symptomology may be explained by stigma and perceived support. This finding is different from Lee et al. (2014) and the findings of Study 1. Lee et al. (2014) found that when dealing with depression, young individuals favor talking to friends over parents or doctor. Study 1 revealed that college students reported having helpful conversations surrounding depression with friends and peers. This difference may be

explained by the individual's ability to explore friendship in college. College students may pick and choose who to spend time around and decide whose opinion matters to them. Given the small, rural area that characterizes most of Appalachia, depressed individuals do not have the opportunity to seek supportive friends, because they see the same individuals every day. Additionally, they do not have the opportunity to truly choose who they want to be friends and spend their time with. Appalachian individuals are stuck with the same peers everyday, whether they are supportive or not.

Recommendations

As originally hypothesized, coming from a conformity-oriented home in which one is not free to speak his/her opinion was a significant predictor of higher levels of depressive symptomology. For example, individuals whose parents use a low care and high control style (McGinn, Cukor, & Sanderson, 2005) and individuals whose parents make decisions for them, are more likely to have depression. This may be because individuals from a conformity home do not feel comfortable discussing their problems with parents, and are not receiving the support or professional help necessary for feeling better. Thus, parents can and should be aware about how they speak to their children and the possible consequences of such styles of communication. Parents need to recognize that while conformity may seem easier and may be more beneficial in some areas, coming from a home in which there is low family connectedness or a conformity orientation home may lead to greater emotional distress (Topham et al., 2011).

Students from a home with a conversation orientation were found to have parental figures that often talk about depression, its symptoms, and resources for those with depression. As the data suggest, students whom already live in an environment in which

openness and individuality are encouraged, may find it easier to begin a conversation surrounding mental health. Adolescents who perceive high levels of parental support exhibit lower levels of depressive symptoms (Anderson, Salk, & Hyde, 2015; Brausch & Decker, 2013). While it cannot be said that conversation-oriented homes do not have depressed adolescents, because these conversations are happening, individuals may be receiving more support from their family or seeking help from professionals. Those students may report lower depressive symptomology because of this, while individuals from conformity homes are not receiving the help or support they need; thus, they may be reporting higher levels of depressive symptomology.

Teachers and friends also have a large role to play. While teachers seem to be playing their role effectively and reducing some instances of depression symptomology, talking to friends while depressed seems to lead individuals in the wrong direction. This is opposite to what Lee et al. (2014) proposes. The researchers state that adolescent individuals "perceive they can resolve depression themselves with the assistance of a friend who can offer authentic empathy and validation" (p.153). However, both findings suggests that a school-based, mental health peer-support program with professional guidance and supervision might be an effective strategy to increase the positive effects teachers are creating, while possibly reversing the negative effects of friends. Thus, a mental health support program is recommended in hopes that it might increase the number of individuals who seek and engage in formal treatment (Lee et al., 2014; Robinson et al., 2010).

Limitations

In order to get accurate data on Appalachian populations, the researcher had to gain access to the region. School principals, and sometimes school boards, acted as the gatekeeper for the schools, and therefore, the population. After gaining access to two high schools from the gatekeepers, parental assent forms were also necessary to have the students participate. While the researcher had great access in the region, many parents may have considered the researcher an outsider and denied consent for their child to complete the survey. This limited the amount of eligible students for the survey. Also, both gatekeepers had very tight restrictions and the data collection had to be completed within the first ten days of the school's academic calendar. Thus, the researcher did not have a long period to collect consent forms. This also lowered the number of possible students to participate in the study.

Another limitation of this study includes a lack of diversity in the sample. According to Usnews.com (2015a, 2015b) both high schools' student populations are mostly comprised of White individuals (90%). Thus, individuals of any other race or ethnicity are not represented by this data.

A limited perspective was provided by the self-reporting measures used. There would also be a more comprehensive picture if participants' parents had also been asked to participate. While the measures being implemented have successfully been used in previous studies, other factors of this survey have the potential to threaten validity and reliability. The external validity of this study is threatened by the use of an online survey to retrieve data from respondents (Ritter & Sue, 2007), especially in Study 1.

Future Directions

Future studies could sample more representative populations of Appalachia, including individuals of all ages. Additionally, persons of color and varied sexuality in relation to this topic could be explored. It would be extremely beneficial to hear from more than the White, high school students living in Appalachia.

While exploring the Appalachian population is very important, this survey could be distributed to other, rural or urban, populations to gain a larger understanding of what is occurring in the "average" home. While it is plausible that Appalachian culture is playing a large role in adolescent depression, without data from regions outside of Appalachia, it cannot be known whether this experience in regionally bound.

The quantitative data collected in Study 2 is a great start to understanding the relationship between family communication and the Appalachian-adolescent's lived experience. However, obtaining more in-depth, qualitative data from this population would further the exploration of the relationship.

Conclusion

The present thesis attempted to examine the possibility of familial and cultural factors of Appalachia contributing to the high rates of depression experienced in the area. Survey data revealed that Appalachian acceptance of tradition and conformity in family communication, is correlated to expression of depressive symptomology by adolescents. Family composition and family communication orientation, and instructive mediation with teachers and friends were shown to influence the likelihood of depression. Continuing this work will contribute to a deeper understanding of Appalachia and the manifestation of depression. Hopefully, the results of this study will shed light on how

conversations at home as well as conversations across Appalachia can impact depressive symptomology.

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Appendix A

IRB Approval Notification
Morgan, Cindy – morgancs <morgancs@jmu.edu>
Mon 3/9/2015 2:21 PM
Inbox
To: Howard, Cori Ann – howar2ca;
Cc: Nelson, C Leigh – nelsoncl <nelsoncl@jmu.edu>;

Dear Cori Ann,

I wanted to let you know that your IRB Protocol entitled, "***Study of Family Communication and Feelings on Life,***" has been approved effective from 03/09/2015 through 03/08/2016. The signed action of the board form, approval memo, and close-out form will be sent to you via campus mail. Your protocol has been assigned No. 15-0405. Thank you again for working with us to get your protocol approved.

All research must be conducted in accordance with this approved submission, meaning that you will follow the research plan you have outlined in your protocol, use approved materials, and follow university policies.

Please take special note of the following important aspects of your approval:

- Any changes made to your study require approval ***before*** they can be implemented as part of your study. Contact the Office of Research Integrity at researchintegrity@jmu.edu with your questions and/or proposed modifications. An addendum request form can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbaddendum.doc.

- As a condition of the IRB approval, your protocol is subject to annual review. Therefore, you are required to complete a Close-Out form before your project end date. You *must* complete the close-out form unless you intend to continue the project for another year. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbcloseout.doc.

- If you wish to continue your study past the approved project end date, you must submit an Extension Request Form indicating a renewal, along with supporting information. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbextensionrequest.doc.

- If there are in an adverse event and/or any unanticipated problems during your study, you must notify the Office of Research Integrity within 24 hours of the event or problem. You must also complete adverse event form, which can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbadverseevent.doc.

Although the IRB office sends reminders, it is ultimately ***your responsibility*** to submit the continuing review report in a timely fashion to ensure there is no lapse in IRB approval.

Thank you again for working with us to get your protocol approved. If you have any questions, please do not hesitate to contact me.

Best Wishes,

Cindy Morgan
Administrative Assistant, Office of Research Integrity
James Madison University
Blue Ridge Hall, Room # 342, MSC 5738
Harrisonburg, VA 22807
Phone: (540) 568-7025
FAX: (540) 568-6409
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Office Email: researchintegrity@jmu.edu

Appendix B
Revised Family Communication Pattern Instrument (Children's Version)

Koerner and Kitzpatrick (2002b)

Directions: Please rate how much you agree or disagree with the following statements using the following scale: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.

1. In our family we often talk about topics like politics and religion where some persons disagree with others
2. My parents often say something like "Every member of the family should have something to say in family decisions."
3. My parents often ask my opinion when the family is talking about something.
4. My parents encourage me to challenge their ideas and beliefs.
5. My parents often say something like "You should always look at both sides of an issue."
6. I usually tell my parents what I am thinking about things.
7. I can tell my parents almost anything.
8. In our family we often talk about our feelings and emotions.
9. My parents and I often have long, relaxed talks about nothing in particular.
10. I really enjoy talking with my parents, even when we disagree.
11. My parents encourage me to express my feelings.
12. My parents tend to be very open about their emotions.
13. We often talk as a family about things we have done during the day.
14. In our family, we often talk about our plans and hopes for the future.
15. My parents like to hear my opinion, even when I don't agree with them.
16. When anything really important is involved, my parents expect me to obey without question.
17. In our home, my parents usually have the last word.
18. My parents feel that it is important to be the boss.
19. My parents sometimes become irritated with my views if they are different from theirs.
20. If my parents don't approve of it, they don't want to know about it.
21. When I am at home, I am expected to obey my parents' rules.
22. My parents often say things like "You'll know better when you grow up."
23. My parents often say things like " My ideas are right and you should not question them."
24. My parents often say things like " A child should not argue with adults."
25. My parents often say things like " There are some things that just shouldn't be talked about."
26. My parents often say things like " You should give in on arguments rather than risk making people mad."

Quick Inventory of Depressive Symptomatology (16-item) (Self-Report)

Rush et. al (2003)

Directions: Select the one response to each category that best describes you for the past seven days.

1. Falling Asleep:
    a. I never take longer than 30 minutes to fall asleep.
    b. I take at least 30 minutes to fall asleep, less than half the time
    c. I take at least 30 minutes to fall asleep, more than half the time
    d. I take at least 60 minutes to fall asleep, more than half the time
2. Sleep During the Night:
    a. I do not wake up at night
    b. I have a restless, light sleep with a few brief awakenings each night
    c. I wake up at least once a night, but I go back to sleep easily
    d. I awaken more than once a night and stay awake for 20 minutes or more, more than half the time
3. Waking Up Too Early:
    a. Most of the time, I awaken no more than 30 minutes before I need to get up
    b. More than half the time. I awaken more than 30 minutes before I need to get up
    c. I almost always awaken at least one hour or so before I need to, but I go back to sleep eventually
    d. I awaken at least one hour before I need to, and can't go back to sleep
4. Sleeping Too Much:
    a. I sleep no longer than 7-8 hours/night, without napping during the day
    b. I sleep no longer than 10 hours in a 24-hour period including naps
    c. I sleep no longer than 12 hours in a 24-hour period including naps
    d. I sleep longer than 12 hours in a 24-hour period including naps
5. Feeling Sad:
    a. I do not feel sad
    b. I feel sad less than half the time
    c. I feel sad more than half the time
    d. I feel sad nearly all of the time
6. Concentration/ Decision Making:
    a. There is no change in my usual capacity to concentrate or make decisions
    b. I occasionally feel indecisive or find that my attention wanders
    c. Most of the time, I struggle to focus my attention or to make decisions
    d. I cannot concentrate well enough to read or cannot make even minor decisions
7. View of Myself:
    a. I see myself as equally worthwhile and deserving as other people
    b. I am more self-blaming than usual
    c. I largely believe that I cause problems for others
    d. I think almost constantly about major and minor defects in myself

8. Thoughts of Death of Suicide:
    a. I do not think of death or suicide
    b. I feel that life is empty or wonder if it's worth living
    c. I think of suicide or death several times a week for several minutes
    d. I think of suicide or death several times a day in some detail, or have made specific plans for suicide or have actually tried to take my life
9. General Interest:
    a. There is no change from usual in how interested I am in other people or activities
    b. I notice that I am less interested in people or activities
    c. I find I have interest in only one or two of my formerly pursued activities
    d. I have virtually no interest in formerly pursued activities
10. Energy Level:
    a. There is no change in my usual level of energy
    b. I get tired more easily than usual
    c. I have to make a big effort to start of finish my usual daily activities (for example, shopping, homework, cooking, or going to work)
    d. I really cannot carry out most of my usual daily activities because I just don't have the energy
11. Feeling Slowed Down:
    a. I think, speak, and move at my usual rate of speed
    b. I find that my thinking is slowed down or that my voice sounds dull or flat
    c. It takes me several seconds to respond to most question and I'm sure my thinking is slowed
    d. I am often unable to respond to questions without extreme effort
12. Feeling Restless:
    a. I do not feel restless
    b. I'm often fidgety, wringing my hands, or need to shift how I am sitting
    c. I have impulses to move about and am quite restless
    d. At times, I am unable to stay seated and need to pace around

    Please complete either 13 or 14, not both
13. Decreased Appetite:
    a. There is no change in my usual appetite
    b. I eat somewhat less often or lesser amounts of food than usual
    c. I eat much less than usual and only with personal effort
    d. I rarely eat within a 24-hour period, and only with extreme personal effort or when others persuade me to eat
14. Increased Appetite:
    a. There is no change in my usual appetite
    b. I feel a need to eat more frequently than usual
    c. I regularly eat more often and/or greater amounts of food than usual
    d. I feel driven to overeat both at mealtime and between meals

Please complete either 15 or 16, not both

15. Decreased Weight (within the last two weeks):
    a. I have not had a change in my weight
    b. I feel as if I have had a slight weight loss
    c. I have lost 2 pounds or more
    d. I have lost 5 pounds or more
16. Increased Weight (within the last two weeks):
    a. I have not had a change in my weight
    b. I feel as if I have had a slight weight gain
    c. I have gained 2 pounds or more
    d. I have gained 5 pounds or more

Instructive Mediation for Depression

Adapted from Valkenburg et. al

Directions: Please rate how much you the following statements occur using the following scale: Never, Rarely, Sometimes, Often, Very Often.
How often do your parents or guardians:

1. Explain what depression is
2. Explain the different types of depression to you
3. Discuss with you the symptoms of depression
4. Explain what depression feels like
5. Pointed out that, untreated, depression can be deadly
6. Describe the different resources in your area for individuals with depression
7. Explain where to go for help if you think someone is depressed
8. Explain what depression treatment is like
9. Explain how to help if you think a friend is suicidal
10. Express that you can talk to them about difficult subjects like depression

How often do teachers or staff at your school:

1. Talk or lecture about depression
2. Explain what depression is
3. Explain the different types of depression to you
4. Explain what depression feels like
5. Pointed out that, untreated, depression can be deadly
6. Describe the different resources in your area for individuals with depression
7. Explain where to go for help if you think someone is depressed
8. Explain what depression treatment is like
9. Explain how to help if you think a friend is suicidal
10. Express that you can talk to them about difficult subjects like depression

How often do your peers:

1. Talk about mental health to one another
2. Talk about mental health to an adult (teacher or parent)
3. Talk about what depression is
4. Talk about the different types of depression to you
5. Discuss about what depression feels like
6. Have conversations surrounding suicide
7. Discuss the different resources in your area for individuals with depression
8. Explore where to go for help if they think someone is depressed
9. Talk what depression treatment is like
10. Talk about how to help a friend that is suicidal
11. Express that you can talk to them about difficult subjects like depression

Demographics

1.   What high school did you attend?
2.   What is your age?
3.   What is your sex?
4.   What year are you at JMU?
5.   Describe who takes care of you at home.

Appendix C

Revised Family Communication Pattern Instrument (Children's Version)

Koerner and Kitzpatrick (2002b)

Directions: Please rate how much you agree or disagree with the following statements using the following scale: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.

1. In our family we often talk about topics like politics and religion where some persons disagree with others
2. My parents often say something like "Every member of the family should have something to say in family decisions."
3. My parents often ask my opinion when the family is talking about something.
4. My parents encourage me to challenge their ideas and beliefs.
5. My parents often say something like "You should always look at both sides of an issue."
6. I usually tell my parents what I am thinking about things.
7. I can tell my parents almost anything.
8. In our family we often talk about our feelings and emotions.
9. My parents and I often have long, relaxed talks about nothing in particular.
10. I really enjoy talking with my parents, even when we disagree.
11. My parents encourage me to express my feelings.
12. My parents tend to be very open about their emotions.
13. We often talk as a family about things we have done during the day.
14. In our family, we often talk about our plans and hopes for the future.
15. My parents like to hear my opinion, even when I don't agree with them.
16. When anything really important is involved, my parents expect me to obey without question.
17. In our home, my parents usually have the last word.
18. My parents feel that it is important to be the boss.
19. My parents sometimes become irritated with my views if they are different from theirs.
20. If my parents don't approve of it, they don't want to know about it.
21. When I am at home, I am expected to obey my parents' rules.
22. My parents often say things like "You'll know better when you grow up."
23. My parents often say things like " My ideas are right and you should not question them."
24. My parents often say things like " A child should not argue with adults."
25. My parents often say things like " There are some things that just shouldn't be talked about."
26. My parents often say things like " You should give in on arguments rather than risk making people mad."

Quick Inventory of Depressive Symptomatology (16-item) (Self-Report)

Rush et. al (2003)

Directions: Select the one response to each category that best describes you for the past seven days.

13. Falling Asleep:
    a. I never take longer than 30 minutes to fall asleep.
    b. I take at least 30 minutes to fall asleep, less than half the time
    c. I take at least 30 minutes to fall asleep, more than half the time
    d. I take at least 60 minutes to fall asleep, more than half the time
14. Sleep During the Night:
    a. I do not wake up at night
    b. I have a restless, light sleep with a few brief awakenings each night
    c. I wake up at least once a night, but I go back to sleep easily
    d. I awaken more than once a night and stay awake for 20 minutes or more, more than half the time
15. Waking Up Too Early:
    a. Most of the time, I awaken no more than 30 minutes before I need to get up
    b. More than half the time. I awaken more than 30 minutes before I need to get up
    c. I almost always awaken at least one hour or so before I need to, but I go back to sleep eventually
    d. I awaken at least one hour before I need to, and can't go back to sleep
16. Sleeping Too Much:
    a. I sleep no longer than 7-8 hours/night, without napping during the day
    b. I sleep no longer than 10 hours in a 24-hour period including naps
    c. I sleep no longer than 12 hours in a 24-hour period including naps
    d. I sleep longer than 12 hours in a 24-hour period including naps
17. Feeling Sad:
    a. I do not feel sad
    b. I feel sad less than half the time
    c. I feel sad more than half the time
    d. I feel sad nearly all of the time
18. Concentration/ Decision Making:
    a. There is no change in my usual capacity to concentrate or make decisions
    b. I occasionally feel indecisive or find that my attention wanders
    c. Most of the time, I struggle to focus my attention or to make decisions
    d. I cannot concentrate well enough to read or cannot make even minor decisions
19. View of Myself:
    a. I see myself as equally worthwhile and deserving as other people
    b. I am more self-blaming than usual
    c. I largely believe that I cause problems for others
    d. I think almost constantly about major and minor defects in myself

20. Thoughts of Death of Suicide:
    a. I do not think of death or suicide
    b. I feel that life is empty or wonder if it's worth living
    c. I think of suicide or death several times a week for several minutes
    d. I think of suicide or death several times a day in some detail, or have made specific plans for suicide or have actually tried to take my life
21. General Interest:
    a. There is no change from usual in how interested I am in other people or activities
    b. I notice that I am less interested in people or activities
    c. I find I have interest in only one or two of my formerly pursued activities
    d. I have virtually no interest in formerly pursued activities
22. Energy Level:
    a. There is no change in my usual level of energy
    b. I get tired more easily than usual
    c. I have to make a big effort to start of finish my usual daily activities (for example, shopping, homework, cooking, or going to work)
    d. I really cannot carry out most of my usual daily activities because I just don't have the energy
23. Feeling Slowed Down:
    a. I think, speak, and move at my usual rate of speed
    b. I find that my thinking is slowed down or that my voice sounds dull or flat
    c. It takes me several seconds to respond to most question and I'm sure my thinking is slowed
    d. I am often unable to respond to questions without extreme effort
24. Feeling Restless:
    a. I do not feel restless
    b. I'm often fidgety, wringing my hands, or need to shift how I am sitting
    c. I have impulses to move about and am quite restless
    d. At times, I am unable to stay seated and need to pace around

Please complete either 13 or 14, not both
15. Decreased Appetite:
    a. There is no change in my usual appetite
    b. I eat somewhat less often or lesser amounts of food than usual
    c. I eat much less than usual and only with personal effort
    d. I rarely eat within a 24-hour period, and only with extreme personal effort or when others persuade me to eat
16. Increased Appetite:
    a. There is no change in my usual appetite
    b. I feel a need to eat more frequently than usual
    c. I regularly eat more often and/or greater amounts of food than usual
    d. I feel driven to overeat both at mealtime and between meals

Please complete either 15 or 16, not both

17. Decreased Weight (within the last two weeks):
    a. I have not had a change in my weight
    b. I feel as if I have had a slight weight loss
    c. I have lost 2 pounds or more
    d. I have lost 5 pounds or more
18. Increased Weight (within the last two weeks):
    a. I have not had a change in my weight
    b. I feel as if I have had a slight weight gain
    c. I have gained 2 pounds or more
    d. I have gained 5 pounds or more

Instructive Mediation for Depression
Adapted from Valkenburg et. al

Directions: Please rate how much you the following statements occur using the following scale: Never, Rarely, Sometimes, Often, Very Often.

How often do your parents or guardians:

1. Explain what depression is
2. Explain the different types of depression to you
3. Discuss with you the symptoms of depression
4. Explain what depression feels like
5. Pointed out that, untreated, depression can be deadly
6. Describe the different resources in your area for individuals with depression
7. Explain where to go for help if you think someone is depressed
8. Explain what depression treatment is like
9. Explain how to help if you think a friend is suicidal
10. Express that you can talk to them about difficult subjects like depression

How often do teachers or staff at your school:

1. Talk or lecture about depression
2. Explain what depression is
3. Explain the different types of depression to you
4. Explain what depression feels like
5. Pointed out that, untreated, depression can be deadly
6. Describe the different resources in your area for individuals with depression
7. Explain where to go for help if you think someone is depressed
8. Explain what depression treatment is like
9. Explain how to help if you think a friend is suicidal
10. Express that you can talk to them about difficult subjects like depression

How often do your peers:

1. Talk about mental health to one another
2. Talk about mental health to an adult (teacher or parent)
3. Talk about what depression is
4. Talk about the different types of depression to you
5. Discuss about what depression feels like
6. Have conversations surrounding suicide
7. Discuss the different resources in your area for individuals with depression
8. Explore where to go for help if they think someone is depressed
9. Talk what depression treatment is like
10. Talk about how to help a friend that is suicidal
11. Express that you can talk to them about difficult subjects like depression

Demographics

1.   What year in school are you?
2.   What high school did you attend?
3.   What is your sex?
4.   What is your age?
5.   Please describe who takes care of you at home.