An Exploration of Rural Youths’ Perceptions and Experiences of Physical Activity

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Dedication

This thesis project is dedicated to my mother and father who inspired me to return to the academic environment as they both did in the fifth decade of their lives; my incredibly supportive wife Tara and my three children Sam, Simon and Isaac who I hope to be an example and inspiration in demonstrating the personal empowerment one achieves through a rigorous educational experience.
Abstract

The purpose of this qualitative study was to explore how rural youth perceive, experience and make meaning of physical activity in their daily lives. This phenomenological study was guided by Sallis’ (2008) social ecological model that served as the framework to conceptualize youth physical activity. Five rural youth ages 11-16 were interviewed to gain a deeper understanding of their experiences. The analysis of the data revealed four emergent themes that described how the participants perceived, experienced, and made meaning of physical activity in their daily lives: positive physical education experiences; self-efficacy; sedentary behaviors; and family support. Positive physical education experiences played a key role as a way for youth to develop the necessary motor skills that enable them to lead a life-long physically active lifestyle. Self-efficacy was perceived as feeling secure and resourceful in the ability to successfully engage in various forms of physically activity independently or with others. Sedentary behaviors for the participants in this study played a role in their everyday lives, but were not perceived as a barrier to being physically active, perhaps due to high levels of self-efficacy. Family support was perceived as being important, but not always necessary for participants to be physically active. Together, their experiences served as pertinent reminders to those with a vested interest in children’s well-being to acknowledge their voices in all aspects of devising interventions.
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Chapter One

Introduction

Research on youth physical activity is broad with much of the focus being placed on the positive physical, emotional and social benefits that have the ability to increase the quality of life in childhood, adolescence and into adulthood (Barnridge, 2013; & Sallis, 2004). Since 1980, the prevalence of obesity has more than doubled among children age 12-18 years, and approximately nine million American children over 6 years of age are already considered obese (Overweight and Physical Inactivity among Rural Children Aged 10-17: A National and State Portrait, 2008). Youth physical inactivity and obesity shares similar patterns and characteristics with poverty in that they negatively affect a greater number of youth with low socio-economic status, certain minority groups, and those who reside in certain geographical locations (Fong, 2011; Sallis, 2009; & Bolin, 2015). While there is a large body of research aimed at supporting the importance of physical activity for youth, along with the identification of the social-ecological facilitators and barriers that influence youth physical activity levels, there are limited studies available hearing from the voices of youth themselves on how they perceive, experience and make meaning of physical activity in their daily lives.

Purpose of the Study

This qualitative study is relevant to the field of youth physical activity research for the reason that it explored firsthand how a small sample of rural youth experience physical activity through their individual and social environments. Although there is a substantial amount of studies available that explore general facilitators and barriers of youth physical activity levels,
this study was not attempting to generalize to other rural youth. Instead, the intent of this study was to gain a deep understanding of the direct experiences of a select group of rural youth who reside in a low-income community. The researcher hopes this study adds to an awareness of the needs and desires of the participants to those entrusted with the responsibility of providing opportunities for youth to be physically active. The guiding research question in this qualitative study was: How do rural youth perceive, experience and make meaning of physical activity in their daily lives?

**Background and Significance of the Study**

Despite approximately fifty million Americans living in rural areas, much of physical activity research has focused on urban settings (Barnridge, 2013). The challenges of conducting research in rural areas have been forming collaborative partnerships with local organizations to implement studies and a lack of rural specific observational and self-reported physical activity instruments (Bolin, 2015). Approximately three out of ten children in the United States are overweight or obese and therefore, are at a greater risk for obesity and chronic diseases in adulthood (Biro & Wein, 2010). Given that early physical activity experiences may play a key factor in predicting adult physical activity habits (Thompson, Humbert, & Mirwald, 2003), the promotion of youth physical activity should be a high priority from a public health perspective. Current research suggests that rural youth have higher overweight and obesity rates than urban and suburban children (Bennett et al; 2007), possibly due to the unique facilitators and barriers to physical activity in rural communities, most notably, self-efficacy (Trost, 1997; Humbert, 2006; Deka & Connelly, 2011), parental support (Humbert, 2006, & Leipert, 2012), a higher prevalence of poverty (Humbert, 2006, Deka & Connelly, 2011), isolation and greater distances to activity inducing facilities (Deka & Connelly, 2011), and low socio-economic status (Leipert,
2012). Many of the interventions designed at increasing physical activity in urban areas are not transferable to rural communities, due to the infrastructure and the unique barriers that exist in rural communities, rendering the “one-size-fits-all” approach as ineffective for addressing rural physical inactivity (Hansen & Hartley, 2015).

Another significant concern in youth physical activity research is following the current paradigm of performing research “on” children, rather than research “with” children. Although well intentioned, these focused efforts by experts ignore the feelings of children as key informants in matters that pertain to their well-being, leading to what Darbyshire (2005) refers to as “the missing child.” While the importance of physical activity for children is widely recognized, the literature reveals a lack of substantial research where children themselves have expressed their perspectives, experiences and understandings of how physical activity provides meaning in the context of their everyday physical and social worlds (Darbyshire et al; 2005).

Finally, there is a lack of understanding of how to apply the adult based social-ecological model of physical activity to youth physical activity interventions (Fong, 2013; Walker, 1999). A review of the literature between January 2004 and November 2012, by Fong (2013) revealed only five original articles that explicitly used the social-ecological framework to analyze factors associated with physical activity participation behavior in youth.

Setting

The participants in this qualitative study were five rural youth between the ages of eleven to sixteen years who reside in a small town, located within a large, low-income rural county in Northeastern Minnesota. The county in which this town resides is ranked as one of the top ten counties with the highest poverty rates in Minnesota. This rating is reflected in the high percentage of students in the county that qualify for the free and reduced school meal
program. The school district also offers a backpack program during the school year for children experiencing food insecurity. Every week during the school year, a local church and food pantry partner together to prepare and pack a weekends supply of easy to prepare snacks and meals in a backpack to carry students over until Monday. The racial demographics of this town include a predominance of Caucasian youth and adults, with a modest Native American population, and a minute number of other ethnicities.

The schools and several locally owned businesses are focal points of gathering for community events and goods and services. One cannot help but feel the sense of resilience and pride by the members of this small community. This sense of resilience and pride are common attributes found in many rural areas and are consistent with Blackenau’s (2009) report suggesting that rural communities should use the qualities of their social climate such as dense social networks, social ties of long duration, shared life experiences, high quality of life, and norms of neighborliness, self-help, and reciprocity to their advantage. There are limited options outside of school sports for youth to be physically active in this community. There is a local fitness center that only offers adult memberships, but there are no recreation centers or indoor swimming pools that children and youth might access. The community is nestled within surrounding lakes and rivers, however there are no accessible walking and biking trails for taking advantage of the scenic beauty. The participants in this study experience poverty in their homes with their families, as well as the consequences of residing in a low-income community that does not offer options and resources to be physically active.
Role of the Researcher

The researcher in this study is a SNAP (Supplemental Nutrition Assistance Program)-Ed Educator with the University of Minnesota Extension. SNAP is the Supplemental Nutrition Assistance Program (formerly known as Food Stamps). SNAP is the nation’s first line of defense against hunger and a powerful tool to improve nutrition among low-income people. SNAP-Ed supports SNAP’s role in addressing food insecurity and is central to SNAP’s efforts to improve nutrition and prevent or reduce diet-related chronic disease and obesity among SNAP-eligible recipients. The goal of SNAP-Ed is to improve the likelihood that person’s eligible for SNAP will make healthy food choices within a limited budget and choose physically active lifestyles. Along with teaching health and nutrition courses, SNAP-Ed Educators develop relationships and form partnerships with community agencies to foster the implementation of policy, system and environmental changes within their agencies that support participants’ efforts to lead a healthy lifestyle. Implementation of PSE strategies are guided by the framework of the social-ecological model which attempts to positively influence all sectors of society, including individuals, families, organizations and policymakers to shape an individual’s food and physical activity choices.

The researcher’s relationship with the participants prior to this study developed through teaching health and nutrition education classes in the local school’s course the past three years, and also through his role as the physical activity director of a community based summer program the participants took part in. Through these interactions with the participants, the researcher developed a strong rapport and level of trust with the students and families, and has gained personal insight into the different contexts of their lives.
The researcher has a strong background in personal fitness training and teaching martial arts to a variety of audiences and is very committed to living a healthy lifestyle and being a role model for others. Although the researcher’s background and past experiences of interacting directly with the participants in this study provided additional insight and understanding of youth physical activity behavior, bracketing was employed as discussed by Fisher (2009) in order to authentically engage the participants to learn about their perceptions and experiences.

Assumptions and Limitations

Applying the adult based social-ecological model of physical activity in this study reflects an assumption that the factors that influence children and youth’s experiences of physical activity parallel to adults. A limitation in applying the adult model to children and youth is that adults have certain liberties or abilities to act on their own behalves that children and youth do not; thus efficacy or power to act on their own behalves may be a factor not acknowledged in the model.

Summary

The purpose of this qualitative study is to explore how rural youth perceive, experience and make meaning of physical activity in their daily lives. There is a strong body of evidence supporting the many benefits of youth physical activity, however, rural youth are an understudied population with much of the research being entrenched in a long-standing paradigm that does research “on” children, as opposed to “with” children which minimizes their input into the interventions that are created in their best interest. The socio-ecological model was the lens in which to understand youth’s perceptions and experiences of physical activity, providing the theoretical framework for addressing the dynamic and complex nature of physical activity behavior.
Chapter Two

Literature Review

This qualitative study explored rural youths’ perceptions and experiences of physical activity and the meaning it plays in their daily lives. In what follows, the literature on rural youth physical activity is discussed to examine the changing nature of rural communities and youth physical activity levels. Next, current research on youth physical activity is reviewed. Lastly the social-ecological model of physical activity is discussed as a framework for understanding the various facilitators and barriers to youth physical activity.

Rural Communities

While there may be some exaggeration about the good old days, there is plenty of anecdotal and statistical evidence to show that rural residents were once better off in terms of physical activity prior to 1980 (Blankenau, 2009). According to Barnridge (2013), rural areas initially did not experience the rapid increase in obesity and physical inactivity levels experienced by urban and suburban areas. Some believe that the traditional agrarian lifestyle, which involved intense physical labor, provided some initial protection for rural populations. Others, such as Seale and Chandler (2003) believe that there is a common misconception that rural areas consistently provide robust opportunities for physical activity more than their urban counterparts because of their expansive amounts of green space, natural environmental amenities and close proximity to natural resources.

Due to the significant number of the US population living in rural communities facing health challenges including high obesity, poverty and limited access to healthcare providers and services, this population has been identified by some researchers as a priority population in the
fight to reduce obesity and improve overall health (Hansen & Hartley, 2015). Low-income rural communities are a unique subculture nestled within mainstream rural culture rendering them vulnerable to health disparities including low levels of physical activity and food insecurity. Murimi and Harpel (2010) explain the health disparities found in low-income rural communities may create an underlying culture that is resistant to engaging in self-care behaviors and utilizing available resources that promote health. Even when they are within close proximity of such resources, resistance to taking advantage of them could be a reflection of the cultural beliefs, practices, and lifestyle choices of those who experience health disparities. Barriers that affect adults’ level of physical activity trickle down to their children and influence their perceptions and experiences of physical activity. Youth are especially affected due to already being limited in deciding their daily routines and having limited options for gaining access to physical activity facilities without transportation and guidance from a parent, school or youth organization (Moore et al; 2010).

The increasing prevalence of rural youth who are not meeting the recommended levels for physical activity and are overweight is one of the most pressing public health concerns facing the country (Moore et al., 2010). In their National and State Portrait, the Rural Health Research Center (2007) report key statistical information on physical inactivity and obesity levels among US aged 10-17 years as a whole, by region, and state by state. The findings of this report indicate a level of disparity that exists for rural residents, minorities, and low-income individuals. According to the report, about one out of four rural children in Minnesota were overweight or obese (24.1%). More than two out of five minority rural children in Minnesota were overweight or obese (42%), compared to 22.4% of white children. In addition, nearly one fourth of rural children (24%) in low-income families (less than 185% of the federal poverty level) were
overweight or obese. Nearly two out of five rural Minnesota children spent more than two hours per day using electronic entertainment media (38.5%). The report indicates a significant level of disparity that exists for rural residents, minorities and low-income individuals.

The Social-Ecological Model of Physical Activity

Physical activity behavior and the factors influencing it are very complex. Models are used to provide a framework to understand the numerous factors that act as facilitators and barriers to physical activity participation. Models are used to help us understand a specific problem in a particular setting or context. They help us to identify factors related to physical activity participation in specific populations therefore enabling the design of more effective interventions. In the context of physical activity, the term intervention is used to describe a strategy, program or policy that is designed to have an impact on physical activity participation (Brown, Salmon, & Telford, 2011).

One of the contemporary models used by researchers to explain physical activity behavior is the social-ecological model (Sallis et al; 2008; Buchan, et al; 2012; Brown, Salmon & Telford, 2014). The term, social ecology refers to individual’s interactions with their own physical and socio-cultural environment (Sallis & Owen, 1999). Prominent researchers (Bronfenbrenner, 1979; McLeroy, 1988; & Stokol, 1993) of the early development of the social-ecological model for health promotion profess that individual, interpersonal, organizational, societal, and community factors should be considered when planning and implementing health promotion interventions. Bronfenbrenner’s (1979) Ecological Systems Theory focused on the relationship between the individual and the environment, observing influences on behavior as a series of layers, where each layer had a resulting impact on the next level. The innermost layer represents the individual, which is surrounded by differing levels of environmental influences,
including social and physical environments and policies. McElroy’s (1988) Ecological Model of Health Behavior classified five different levels of influence on health behavior, although this did not include physical environment, which is an essential element of a social-ecological model of physical activity. Stokol’s (1993) Social Ecology Model of Health Promotion identified the core assumptions which underpin the social-ecological model (Glanz, 2008).

The social-ecological model for studying physical activity behavior emerged from stage based and cognitive based models for understanding the determinants of physical activity behaviour that relied predominantly on predicting and changing individual behavior within a cognitive based paradigm that focused less on how social and environment factors influence behavior (Lox et al; 2010). The social-ecological model as a framework is attractive for identifying factors affecting physical activity and health promotion programs because multiple levels (individual, social, environmental, political) of influence can be addressed simultaneously rather than the conventional focus on individual behaviors (Buchan et al; 2012).

The two distinct approaches used by researchers for addressing physical in-activity interventions over the span of three decades has been social cognitive theory and the transtheoretical stages of change model. Social Cognitive Theory within the context of physical activity describes factors that determine behavior while simultaneously identifying the mechanisms that through which these factors work and how they may be structured to produce effective health behaviors (McAuley, 2003). Personal characteristics include emotions, thoughts, and perceptions, values and beliefs, personality traits, and biological factors (Barkley, 2012). Environmental factors include social influences such as friends, family, co-workers, cultural norms, public policy, and aspects related to physical space such as home, workplace, and neighborhood (ACSM, 2014, Barkley, 2012). Behavioral attributes include refer to past and
present behaviors and experiences. Two central concepts in the social-cognitive theory are self-efficacy and outcome expectations. The concept of outcome expectations suggests that in order for an individual to adopt a new behavior (e.g. physical activity), there must be strong belief that the behavior will provide positive outcomes, which are valued by the individual and perceived to outweigh any potential negative outcomes (e.g.; physical discomfort, fatigue, less time for social activities) associated with the behavior (Marcus & Forsyth, 2009).

Social Cognitive Theory is associated with self-efficacy as a key variable and powerful factor in predicting behavior. Bandura (1999) describes self-efficacy as “people’s beliefs about their own level of functioning and over events affect their lives” (p.118), and as “the foundation of human agency” (Bandura, 1999, p.28), it is critical to the level of human functioning that can be achieved. In regards to physical activity compliance, Bandura is saying that unless people believe they can be successful in participating in physical activity, they will have very little incentive to persevere and sustain the behavior. The core of motivation is rooted in the belief that one has the power to produce changes by one’s actions. Self-efficacy is linked closely to social cognitive theory because it influences which challenges and goals people choose to undertake, and how much effort to put towards those goals and challenges in the face of difficulties. There is a diverse body of literature that has supported self-efficacy as a powerful predictor of physical activity behavior, with further research in its measurement.

The trans-theoretical model, also known as the “stages of change model”, originally emerged in the late 1970’s as the result of studies and observations regarding individuals involved in smoking cessation (Lox et al., 2010; Prochaska & DiClemente, 1983) and how people changed behavior on their own. Hutchinson (2009), states that among all the models and theories of behavioral change, the TTM is perhaps the most commonly adapted with regard to
increasing physical activity behavior. Individuals move through five stages of change including pre-contemplation, contemplation, preparation, action and maintenance (Barkley, 2012; Lox, 2010; Moore & Tschannan, 2010). Adoption and maintenance of health behavior is described as a cyclic process whereby individuals pass through a series of specific stages, each characterized by a particular pattern of psychosocial and behavioral changes (Marcus & Forsyth, 2013).

An increased acceptance and understanding of physical activity as a complex behavior, influenced by multiple factors that intersect with one another, has resulted in a lack of consistent interventions to address long-term adherence to physical activity. The dynamic and ever-changing nature of factors influencing physical activity behavior exceed the limitations of the social-cognitive and trans-theoretical models of physical activity, which has led to the social-ecological model as being widely accepted in guiding public health policy in the United States. The Center for Disease Control (2003), The United States Department of Health and Human Service’s Physical Activity Guidelines for Americans (2008) and the United States Dietary Guidelines for Americans (2015) propose the use of the social-ecological model as a framework for addressing nutrition and physical activity intervention at multiple levels.

Fong’s (2013) review of the literature was significant in pointing out that between January 2004 and November 2012, only five original articles exclusively used the socio-ecological model as a framework to address factors associated with youth physical activity participation. Fong’s (2013) conclusions suggest that the array of intervening factors in the literature would affect youth physical activity participation. Despite the explanatory power the socio-ecological model holds, Duncan et al. (2012) notes that a major shortcoming of the model is its inability to provide specific mechanisms through which particular influences may interact
and influence behavior. This lack of specificity and instruction presents challenges that are not apparent when utilizing cognitive based models (Duncan, et al., 2012).

**Barriers to Physical Activity**

Barriers to physical activity are defined as factors that decrease or impede the likelihood of participation in physical activity behavior (Moore, et al.; 2010). Barriers exist, interact, and influence one another at the individual, social, environmental and policy levels of the socio-ecological model. Barriers consistently found at the individual level include: a lack of awareness of the health benefits of physical activity (Deka, 2011); an emphasis on excessive competition (Leipert, 2012); a lack of time due to homework and family responsibilities (Humbert, 2006; Deka, 2011; Moore 2010 & Leipert, 2012); and an excess participation in sedentary activities such as TV, movies and video games (Halpern; 2008; Leipert, 2012).

An individual’s lack of awareness of the health benefits of physical activity is linked to the underlying values and attitudes of physical activity and health related behavior of the culture where the individual resides. In particular, rural areas have been shown to have a unique culture that influences health behaviors ranging from diet and exercise to the fundamental willingness to seek medical care, and it could be that this culture has a more accepting attitude towards youth physical inactivity and overweight levels (Tarasenko, 2015). A qualitative study by Murimi, et al; (2010) examined the underlying culture among low-income rural populations and reported that despite the documented benefits of preventive care, people with low-income and low-levels of education who live in rural areas are less likely to use preventive services. They are less likely to support preventive health interventions and programs. Although Murimi et al; (2010) and colleagues study focused on adults, youth are directly affected by the values and priorities of the
culture they reside until they are at the age where they can begin making more independent decisions on their individual health behaviors.

A quantitative study by Deka and Connelly (2011) made a keen discovery that close proximity to fitness facilities, such as walking and biking trails, did not provide evidence that proximity increased physical activity levels. They concluded that one of the possible reasons was a lack of awareness of the health benefits of physical activity. The sample population for the study were urban low-income, minority populations. Further research in rural populations with varying levels of socioeconomic status and race could lead to a greater understanding of the factors that influence individual awareness of the health benefits of physical activity.

The emphasis on excessive competition was identified as a barrier to youth physical activity participation by Leipert (2012), decreasing their enjoyment of the activity for sheer enjoyment rather than for competition. Participants in Leipert’s (2012) study discussed issues that they had with overly competitive coaches. If competitiveness was overly emphasized, some participants considered ceasing their physical activity. The seminal report by Halpern (2008) on physical activity levels among low-income children and youth coincides with Leipert’s (2012) findings that in American society, much of how sports are organized and carried out, and celebrated may have the sum effect of contributing to inactivity. Halpern (2008) explains that the hyper-competitiveness, violence and extreme aggression characteristic of professional sports have spread downward and outward, infecting all kinds of organized sports. Accordingly, viewing of sports on TV by youth can actually lead to passivity rather than activity due to borrowing pride from idolized athletes. In effect, those who cannot or dare not compete on their
own, hire others to play and contend on their behalves and are inclined to watch others exert themselves rather than engage in the experience of the activity themselves (Halpern, 2008).

More children are spending more time indoors at earlier ages, in institutional settings or at home, resulting in spending more time in sedentary activities, such as watching television, listening to music, and playing video and computer games. T.V. watching and related activities combine physical inactivity with increased likelihood of snacking which is a perfect formula for producing youth obesity. The marketing of snack foods and soda during children’s peak television viewing hours can stimulate unnecessary eating, with most of these being low-nutrient, energy dense foods that can lead to weight gain. Such foods produce feelings of lethargy, which contributes to physical inactivity. Excess television and media use were highly rated social barriers to participating in physical activity (Leipert, 2012; Quarmby, Dagkas, & Bridge, 2011). Leipert (2012) reported that television was an important barrier to physical activity for the majority of the participants. Watching television and playing video games was often the default choice for many youth because there are limited opportunities for them to be physically active once they got home. Using the computer had become a daily routine for many participants in Leipert’s study (2012). Participants included that they used the computer all day at school for academics, and also for e-mailing, online gambling, watching videos online and downloading and listening to music and completing homework. Quarmby et al. (2012) reported that children in single parent families spend more time in sedentary activities due to a lack of parent support in the form of transportation that prevented engaging in physical activities, and instead engaged in sedentary activities such as video games and playing on the computer. The fact that children from single-parent families reported spending more time in sedentary activities (Quarmby et al., 2012) may be due to a lack of availability of joint family activities. Interventions aimed at the
environmental level, viewed through the social-ecological model of physical activity, are important because they go beyond advising individuals what they should do to create the structures in the environment that make physical activity and health related behaviors possible. Much of the evidence to date on environmental change relates to physical activity comes from urban and suburban areas (Barnridge, et al., 2013; Moore, et al., 2010), with rural settings only recently garnering researchers’ attention. Urban and rural physical environments are extremely different and these differences often make findings obtained in urban settings invalid in rural settings (Moore, et al., 2010). For example, many of the environmental determinants identified as supports for physical activity such as sidewalks, street connectivity, population density, and diversity of land use in urban settings are not applicable to rural settings. Trails, parks, and recreation areas may be a viable location for physical activity in urban and rural settings, however, since rural areas have low population densities, there is greater likelihood that rural residents will live further from activity areas compared to urban residents (Hansen & Hartley, 2015). The primary environmental barriers to participating in physical activity include loss of outdoor play spaces (Halpern, 2008), distance from facilities (Deka & Connelly 2011; Moore et al., 2010; Leipert, 2012; Hansen & Hartley, 2015) and cost (Humbert et al., 2006).

The time spent playing outdoors is a major determinant of children’s physical activity levels. The physical spaces that children inhabit strongly shape the developmental experiences to which they have access, including the types and amounts of physical activity in which they engage. Halpern’s (2008) report on physical inactivity among low-income children explains that being able to play and use outdoor environments is developmentally important for children and has observed that most children’s lives offer less and less opportunities for unstructured and spontaneous play which results in motion deprivation. Halpern (2008) goes on to further state
that resistance to children’s outdoor play is far from new; it goes back as far as the 1880’s and was a concern of progressive reformers early in the 20th century. There was a time when children seemed to thrive in the city streets, playgrounds, and play lots. They used the environment around them for their own purposes using walls, trees, and fences and created and passed on games. At some point in time, the balance between the developmental benefits and the risks of outdoor play environments shifted toward the latter. Many parents no longer permit their children to play outside and use playgrounds due to perceived danger, resulting in children not using their physical environment as they did in the past.

Distance from facilities was a significant barrier for low-income rural populations according to a qualitative study by Moore et al. (2010). Most rural parents in this study reported that recreation centers and other centers for physical activity were at least a 20-minute drive from their home. Participants noted that there were opportunities for ice-skating and skateboarding in the area, but these were not activities that ethnic kids would enjoy. These findings of culturally unacceptable opportunities for physical activity were consistent with a study by Macintyre (2007) revealing that the cultural interpretations of the facilities may be a reason for low rates of participation in low-income urban participants.

Poverty leading to low socioeconomic status places a variety of stresses on families that restrict children’s time and opportunity for physical activity. Parents who are forced to work long hours and long distances from home may not view being physically active as an important value to promote to their children. Low-income parents who work long hours increase child care and other family responsibilities and reduces parent’s ability to serve as role models and social agents for their children. In the qualitative study by Humbert et al. (2006), using focus groups
consisting of high socioeconomic status and low socioeconomic status, the low socioeconomic students reported that if the cost was too high that they would not be able to participate in an activity. Moore et al. (2010) reported that the cost of gas and the cost of activities were barriers to physical activity.

Public policy contributes to constraints on children’s physical activity levels and can be due to the political will to implement policies that promote PA. The primary barrier that consistently arises at the policy level is weak implementation of school wellness policies (Belansky et al., 2013; Xu et al., 2010; Langville & Rodgers, 2010). In a study Belansky et al. (2010), the researchers explain how the US responded to the childhood obesity epidemic, issuing a mandate under the Child Nutrition and Women, Infants, and Children Reauthorization Act of 2004 requiring school districts participation in the National School Lunch Program to create a Local Wellness Policy by June 2006. The intent of the Local Wellness Policy was to address childhood obesity by increasing opportunities for healthy eating and physical activity. In 2010, the Local Wellness Policy mandate was reauthorized under the Healthy, Hunger – Free Kids Act and included several new requirements. School districts were required to have language in their wellness policy about goals for nutrition promotion; districts were instructed to assemble a broader team of community members to assist in developing, implementing, and evaluating the wellness policy.

The results of the initial effect of the LWP mandate on school environment and policy features that had been shown in previous studies to be associated with increased student physical activity and healthy eating were modest, with small minimal gains achieved related to healthy eating and no gains related to physical activity were reported after the first year of
implementation in a rural, low–income school in Colorado (Belansky et al., 2010). The same pattern was consistent with other state and national studies by Belansky et al; (2010) and Metos (2007), examining the effects of local wellness policies on school environments. Belansky et al; (2013) administered a survey to a random sample of principals, physical education teachers, and food service managers in 45 rural, low-income elementary schools in Colorado. It is worth noting that response rates were exceptionally high being at 89%. The findings of the Belansky, et al. (2013) study revealed that after five years after the LWP went into effect, the amount of time for physical education and recess had not increased; however, a positive gain was that the policy prohibited teachers from withholding recess as punishment and withholding recess to make up missed instructional time, class work, or tests in other subjects. There was also a positive significant trend indicating that teachers were setting up games and activities during recess more frequently than they were five years prior. There were no policy changes protecting physical education time. Budd et al. (2012) suggests that successful school policy implementation depends on a school’s organizational capacity to deal with challenges, set clear goals, and have accountability practices in place.

Schools in rural low-income areas have limited organizational capacity because of small staff size and personnel performing multiple roles and tasks. Schools also reported that No Child Left Behind Act has altered the value system of schools by putting their focus on providing academic achievement and standardized tests (Budd et al., 2012; Langville & Rodgers, 2010). Studies have also found that the extent to which wellness policies are implemented will depend on whether school boards, superintendents, principals, and teachers are held accountable for the quality of their schools’ culture and values towards physical activity and health related behaviors. Partnerships without outside organizations and finding champions to assist in
implementing major policy changes such as increased recess and physical education time were recommended (Budd et al., 2010; Langville & Rodgers, 2010).

**Facilitators to Physical Activity**

Facilitators to physical activity are defined as factors that increase the likelihood of participation in physical activity behavior. Facilitators exist, interact and influence one another at the individual, social, environmental and policy levels of the social-ecological model. Facilitators at the individual level include: self-efficacy (Trost, 1997; Zhang et al., 2012); fun (Humbert, 2006; Leipert, 2012; Hyndman et al., 2012). Self-efficacy is strongly linked to social cognitive theory (Bandura, 1986) and has been applied most successfully to changing physical activity behavior. This social cognitive theory proposes that behavior change is affected by the interactions among the environment, individual factors, and attributes of the behavior itself, a concept which has been called reciprocal determinism (Bandura, 1986), in which each of these three factors may affect or be affected by the other two.

The central concept of self-efficacy is having confidence in one’s ability to successfully perform a particular behavior. People’s perceptions that they can be successful increases the likelihood that they will engage in that behavior. Self-efficacy is behavior specific; therefore, it is important to evaluate and improve self-efficacy for the type of activity being targeted. Liebert’s study (2006) revealed from conversations with youth that fear of getting cut, being picked last, and being made fun of were detrimental to participation in physical activity. Self-efficacy is generally a quantitative measurement administered through a questionnaire based on a rating scale asking how confident a person is about specific activities (Zhang et al; 2012) however, Liebert’s (2006) study used the term perceived competence as a theme that emerged from a
A particularly interesting study by Trost (1997) involving rural fifth grade children examining the determinants of various intensity levels of physical activity revealed gender differences in self-efficacy. For girls, overcoming barriers related to homework obligations and feelings of fatigue were facilitators, and for boy’s, confidence in one’s ability to be active despite poor weather conditions was the most common facilitator for vigorous physical activity (Trost, 1997).

Closely linked to self-efficacy was fun as reported by Leipert (2012) as a facilitator for rural youth participation in physical activity in a qualitative study using photo voice to document their health realities. Photo voice is a relatively new method for health research that adopts an innovative approach whereby participants use cameras and logbooks to describe their life experiences. An important aspect of generating interest, or maintaining interest, in physical activity for participants was their enjoyment of the activity. The link between fun and perceived competence was established in the work of Mandigo and Thompson (1988), who determined that physical activity leaders need to create developmentally appropriate environments for all children by modifying the challenges of the activity to suit the skills of the child.

Facilitators at the social level include parental support (Humbert, 2006; Leipert, 2012; Trost, 1997; Zhang et al., 2012; Xu et al., 2010); adult involvement (Humbert, 2006; Moore, 2010); friends support (Zhang et al., 2012; Hyndman et al., 2012); early exposure to activities (Leipert, 2012); strong social ties (Halpern, 2009), and physical education teachers support (Zhang et al., 2012; Hyndman et al., 2012). Social factors were consistently identified in studies examining youth physical activity behavior indicating the significance of their influence on physical activity. Parental support, adult involvement and the support of physical education
teachers were identified in qualitative studies (Humbert et al., 2006; Leipert, 2012) through interviews with focus groups. Adult involvement could be a parent, guardian, college student, teacher or coach, provided that he or she was able to be organize and activity and act as a responsible role model. In another study by Leipert (2012), family support and friends’ interests were perceived as both a facilitator and barrier to participating in physical activity. If parents were perceived as role models who guided and encouraged being physically active, it was perceived as a facilitator. When parents were not interested in being active, participants often neglected physical activity themselves. Leipert also found through discussion that students’ desire and role they wanted the adult teacher or coach to play was different based on socio-economic status. Students of high socio-economic status talked about the ways in which their parents could support them, such as driving them to a game and providing first aid. In contrast, students of low socio-economic status were content to receive any kind of adult involvement. Low socioeconomic students were also extremely enthusiastic about the possibility of having an adult participate in the activity. These findings could be helpful in implementing future youth physical activity programs that target low-income populations, taking into account that adequate adult social support is needed to increase their effectiveness.

Trost (1997) reported in her study of rural elementary youth that perception of mother’s activity level was found to be a significant facilitator for youth girls’ participation for vigorous physical activity, but was not a facilitator for youth boys. It may be that elementary boys are more influenced by their fathers or other male role models. Further research is needed for exploring differences of adult influence on male and female youth physical activity participation.
Social support from peers and friends and engaging in physical activities with friends was found to play a key role effecting physical activity participation in young people (Zhang, et al; 2012; Hyndman, et al; 2012). A qualitative study by Moore et al. (2010) examining both parent and youth perceived barriers and facilitators among rural and urban youth found that social support and engaging in physical activity with friends was important for establishing relationships. Liepert’s (2012) photo voice study shared that their friends’ interests often had a large impact on what types of activities they would share. Some individuals began playing on an athletic team in order to spend time with their friends, and also found friends helpful in exposing them to new activities and keeping them motivated.

This review of the literature of environmental facilitators and barriers for physical activity suggests differences between urban and rural environments which falls in line with the suggestion that targeted interventions for specific subpopulations are needed to increase physical activity (Joens et al., 2008). Rural children and adults have significantly higher rates of obesity than their urban counterparts, even after accounting for differences such as socioeconomic factors, eating behaviors and physical activity. Higher rates of overweight and obesity among rural residents, even after accounting for these demographic and behavioral factors, suggests that rural environments themselves may somehow promote obesity (Hansen & Hartley, 2015). Studies on whether urban residents are less active than rural residents have yielded mixed results; differences across geographic regions and with various methods of measuring physical activity are examples that illustrate the complexity of understanding how and where rural residents are physically active. A major difference between urban and rural environments is that regular active transportation may be an unrealistic option for some rural residents. This increases the importance of active recreation opportunities in rural communities.
Although the association between physical activity and social factors has been widely examined, geographical factors have received less attention. The Midwest has the largest land mass allocated to agriculture in the United States, but little information is available in the activity patterns or prevalence of obesity of urban and rural youth in this part of the country. Nationally, adults and youth in rural areas have been shown to have a higher incidence of obesity and physical inactivity than adults in urban settings (Jones, et al., 2008) which may seem counterintuitive based on the belief of the high physical demands of rural life, but is reflective of the changing nature of rural life. Rural life does not necessarily encompass physically demanding tasks anymore and may be a factor in the higher incidence of obesity in rural areas.

Facilitators identified at the environmental level include: equipment availability (Zhang, et al., 2012; Xu et al., 2010) proximity to biking and walking paths (Belansky et al., 2013; Hudson, 2009) and school location (Xu et al., 2010; Hyndman et al., 2013). Studies conducted by Zhang et al. (2012) and Xu et al. (2010) found that equipment availability was a factor of students’ physical activity participation, though the contribution was relatively small, only accounting for 1.1% of the variance in physical activity participation. Both researchers, however, noted that making equipment and facilities accessible might not be sufficient to increase students’ physical activity level, and that health promoters need to provide a supportive social environment, in addition to facilities and equipment to enhance physical activity self-efficacy and engagement. The finding on a supportive social environment was consistent with a study by Deka and Connelly (2011) in which they hypothesized that lower rates of participation of low-income and minority populations in physical activity is due to a lower geographic proximity to fitness facilities, walking paths and bike trails. The findings provided no evidence that low-income and minority populations had a lower level of geographical proximity to activity-
inducing facilities, walking paths and bike trails. The study concluded that lower rates of 
participation of low-income and minority populations were caused by behavioral and social 
factors rather than proximity to facilities, including lack of awareness of the health benefits of 
physical activity, lack of financial resources, time and lifestyle choice. The authors state the 
point that the results of the study should not deter further investment in facilities in low-income 
and minority communities, but understand that this population may need various resources and 
interventions in a supportive social environment is consistent with Zhang et al. (2012) and Zu’s 
et al. (2010) findings.

Policy is the highest level of influence on lower levels within the social-ecological model 
(Stokol, 1993). The 2008 U.S. Physical Activity Guidelines (U.S. Department of Health and 
Human Services) describe policy as a written statement of an organizational position, decision, 
or course of action. Ideally, policies describe actions, resources, implementation, evaluation, and 
enforcement. Because this review is focused on the facilitators and barriers for youth physical 
activity, school policies related to participation in physical activity will be discussed. Facilitators 
at the policy level include: accessible transportation options (Leipert, 2012); afterschool physical 
activity programs (Halpern, 2008); and implementation of school wellness policies (Hennessy, 
2010).

Youth spend a significant amount of their day at school. Thus, the school can have a 
major impact on the physical activity behaviors of students. One of the policy suggestions from 
Leipert’s (2012) study was for the school and community to develop a ride-sharing website 
where parents and youth drivers could list where they are driving and how many seats they have 
available for others. Other youth or parents could access the website and contact individuals to
obtain transportation. The development of a ride-sharing website would be more cost-effective than providing students with a late bus. The implementation of a ride-sharing program coincides with schools, churches and community centers having the ability to offer after-school programs that promote physical activity. Halpern’s (2008) seminal report in conjunction with the Robert Wood Johnson Foundation expressed that non-school hours are in many respects better suited to efforts to renew physical activity. Such programs offer a largely, unrealized potential as a basis for physical activity. He noted, however, that the majority of after-school programs are not consciously and deliberately attentive to children’s need to be physically active after a day at school. Many of the programs are adult-controlled, rule-bound institutional settings that limit children’s movements and choices. At their best, after-school programs have certain qualities that facilitate physical activity participation that make them positive settings for children to explore new activities and build skills at their own pace. They also accommodate individual differences and work well in gender-integrated settings which Trost et al. (1997) found significant in their study of gender-related differences for predicting moderate to vigorous physical activity in rural 5th grade students. Adults play supportive, non-judgmental roles, children feel safe psychologically as well as physically, and there is a low risk of failure which is consistent with social and environmental facilitators for youth physical activity.

Strong implementation of school wellness polices provides perhaps the greatest facilitator for youth physical activity due to its potential positive effects on the other levels of the socio-ecological model. School based policies exist within the context of a broader environment that is well described through an ecological framework. Sallis (2004) specified that an ecological perspective directs attention to broader political and environmental factors that shape individual and interpersonal characteristics within community and organizational setting, such as schools.
An exploratory study by Langville and Rodgers (2010) examined the articulations between the levels of the socio-ecological model that proposed a somewhat directed downward influence of the higher levels of the social-ecological model of physical activity on the lower levels of influence. A school culture that prioritizes and values physical activity is a powerful facilitator supporting physical activity opportunities and positively influences the will of the school to foster physical activity. Lastly, all levels of stakeholders agreed that for a school to have a supportive culture that supports local level policies, there needed to be individuals with a passion to serve as a facilitator for physical activity and health. The idea of having a champion to create change that prioritizes health and stimulates policy development was identified. Stakeholders felt that champions could be different in each school and vary from the principal, vice principal, classroom teacher, and physical education specialists.

Many theoretical models have been proposed to understand the factors influencing physical activity behavior. The social-ecological model of physical activity provides a broad understanding and framework for exploring the unique facilitators and barriers that exist within various subpopulations that influence physical activity levels. The adaptability of the social-ecological model to understudied rural populations makes it a suitable choice to guide the current study.

The Forgotten Child

Children’s health research is an international multi-million dollar enterprise comprised of researchers, doctors, educators, policy officials and social scientists striving to develop new understandings and create interventions to improve the lives of children (Darbyshire et al., 2005). The current paradigm guiding children’s physical activity research has established a deep rooted
tradition of performing research “on” children rather than research “with” children. Researchers undertaking qualitative research with children confront cultural, social, psychological and political perspectives that are resistant to the idea of taking children seriously. These institutions have entrenched the convention of doing things to children while almost exclusively focusing on the responsibilities of adults. Children may be seen as unsophisticated or silly and incapable of being taken seriously in discussions about their needs. Although well intentioned, frequently youth physical activity researchers and experts in the field of children’s health research implement strategies, policies and make recommendations in children’s best interests without taking their viewpoints and feelings into account resulting in what Darbyshire et al; (2005) refers to as the “forgotten child.”

Walkerdine (1993) explains that the “forgotten child” is a shortcoming of developmentalism. Developmentalism maintains that children lack the capacity for abstract thinking that characterizes the maturity of later adolescence and adulthood and thus makes children poor research respondents (Scott, 2000). According to developmental theorist Piaget (1952), children do not develop adult like capacity for abstract thought and reason until ages eleven through fourteen. This explains children’s inability to delay gratification in pursuit of a future, less tangible benefit, such as physical activity. Piaget (1952) further explains that children also have a lower capacity for informal processing and may have difficulty distinguishing between effort and ability as causes of specific achievement outcomes, and rely more heavily on parents and peers for their values and beliefs. Although the theory of developmentalism may affect children and youth’s abilities to fully comprehend the physical and social benefits of being physically active and consequences of being physically inactive; the
theory of developmentalism cannot remove the lived experiences and perceptions of physical activity from children and youth.

The researcher extends Derbyshire’s et al; (2005) concept of the “forgotten child” to include the misguided focus on competition and winning in youth sport that benefits the most advantaged and wealthiest in a society, while “forgetting the children” who prefer non-sport physical activity, or are of low socio-economic status. There is little evidence to support that the focus on competition and winning will increase youth physical activity levels, while there is supporting evidence to suggest that physical activity for children is more enjoyable when they are not forced to compete, but encouraged to experiment with different types of activities (Weiler et al; 2014).

Summary

The purpose of this study is to explore how rural youth perceive, experience and make meaning of physical activity in their daily lives. The review of the literature provides structure and an entrance point for the researcher to further explore the broad landscape of youth physical activity research. The review of the literature provides insights into the unique culture of rural populations that identifies their strengths and vulnerabilities for addressing the pressing concern of youth overweight and obesity levels connected to inadequate levels of physical activity. The literature provided also provided insight and understanding of the development of the social-ecological model of physical activity which is ideally suited for studying the complex behavior of physical activity and identifying the facilitators and barriers that influence youth physical activity levels at multiple levels within various sub-populations. Finally, the literature provided insight and understanding of how the present paradigms guiding youth physical activity research
have resulted in a “forgotten child” amongst the well-intentioned, nonetheless, misguided focus of many physical activity researchers and youth sport experts who neglect listening to the voices behind the lived experiences of those youth who need to be heard most. The researcher in this study is electing to take a child-centered approach to exploring how rural youth perceive and experience physical activity in their daily lives, providing an opportunity for a select group of youth’s voices to be heard through their experiences.
Chapter Three

Youth physical activity research is situated within the contexts of intrapersonal, social, environmental and policy factors. The purpose of this phenomenological study was to gain a deeper understanding of the ways in which rural youth perceive, experience, and make meaning of physical activity in their daily lives. In this chapter, the research design, the context of the study, the participants, data collection and analysis of data of the study are described.

Research Design

A phenomenological research design was adopted for this study. Phenomenological research is focused on richly describing the meaning of the experiences of a phenomenon by those who live the experience. Phenomenological studies draw upon narratives of people who share or have in common the lived experience of the phenomenon of interest. Through the systematic analysis of study participants’ stories, perceptions, feelings, and thoughts about their experiences, the researcher identifies emergent patterns and themes among the participants’ experiences, to describe the meaning of the phenomenon as it is experienced. (Creswell, 1998).

Chandler (2005) contends that the importance of movement lies in the impressions that it stimulates in the individual, arguing that subjective knowledge is at the heart of physical activity inquiry. Through qualitative methodology, physical activity researchers are able to examine the way people perceive, create and interpret their world through movement. This methodology stresses the importance of studying the subjective experiences of the individual participants that provides a richness and depth of information to the field of physical activity.

A phenomenological design was well-suited to this exploratory study because it focused on listening to the lived experiences of a small group of youth as the main focus of analysis, that allowed for a distinct understanding of the perspective and experiences related to physical
activity and facing the challenges of rural poverty. The researcher’s intention was to gain a
deeper understanding of how living in rural poverty shapes and creates the perceptions,
experiences and meaning of physical activity for the participants’ in their day to day lives, in
order to provide the reader insight into the participants’ realities.

The aim of the researcher in phenomenological research is to describe as accurately as
possible the phenomenon, while refraining from any pre-given framework about the
phenomenon being studied. The researcher in this study used bracketing, which is a method
used in qualitative research to mitigate the potentially negative effects of unacknowledged
preconceptions related to the research to increase the rigor of the study (Fisher, 2009).

**Setting and Participants**

The participants in this study were a group of five youth between the ages of eleven and
sixteen, experiencing the challenges of living in rural poverty in the upper Midwest of the U.S.
The youth in this study had previously participated in a community based physical activity
program, and also interacted with the researcher through health and nutrition education classes
presented at school and participating in an after-school cooking program.

**Data Gathering and Analysis**

Upon receiving informed consent from parents and participants, the researcher
conducted sixty-minute audio-recorded interviews with each participant. The social-ecological
model informed the development of semi-structured questions that allowed for follow-up
questions to gain further insight into the participants’ experiences. The nature of the questions
pertained to the participants’ physical and social environments in relation to physical activity.
All interviews took place during non-school hours at a local church, which was the location of a
community-based nutrition and physical activity program the participants previously attended.
The intention behind conducting the interviews at this location was to provide a familiar and comfortable space for the participants outside of the school setting.

The process of analysis of the data involved three tiers of analysis consistent with the constant comparative method (Creswell, 1998; Hycner, 1999; Litchman, 2013). The first tier of analysis involved close listening of each individual interview and cataloging the topics discussed and moments that the participant emphasized. The second tier of analysis involved a close reading of the cataloged topics to identify emerging patterns across interviews. The third tier of analysis involved clustering the patterns into categories identifying distinguishing and defining attributes among the patterns in each category. The attributes were then weaved together to define the emerging themes.

Summary

This qualitative study employed a phenomenological research design to explore rural youths’ perceptions and experiences of physical activity. The researcher conducted semi-structured interviews guided by the social-ecological model to facilitate the collection of participant’s perceptions, experiences and meanings of physical activity. The data were gathered and analyzed using three tiers of analysis to uncover the emergent themes that tell the story of how the participating rural youth perceive, experience and make meaning of physical activity in their daily lives.
Chapter Four

Results and Discussion

Results

This chapter presents the findings which describe how the participating youth perceive, experience and make meaning of physical activity in their daily lives. Four prominent themes emerged from an analysis of the interview data: positive physical education experiences; self-efficacy; sedentary behaviors; and family support. Positive physical education experiences were described by the participants as having a structured and safe environment in which they could have fun learning and participating in a variety of competitive and non-competitive games and sports. Self-efficacy was described by the participants as feeling confident and secure in their ability to be physically active in structured and unstructured settings. Sedentary behaviors were described by the participants as time spent engaging in leisurely activities that involved low levels of energy expenditure such as watching television, using computers, playing video games and interacting on social media sites. Family support was described by participants as the various roles family members served that influenced their physical activity levels. Each of these themes collectively expressed the participant’s experiences of what it means to be physically active in the context of their home, school, and social environments.

Positive Physical Education Experiences

Positive physical education experiences emerged as a theme from the analysis of the interviews in how this small group of rural youth perceive, experience, and give meaning to physical activity in their daily lives. The descriptions and attributes that created a positive physical education experience for all youth were comprised of variety, fun and structure. For a few of the youth, physical education was an avenue for the healthy release of pent up frustration.
and anger, and a measuring stick for success and achievement. Three of the five youth in the study shared that they did not participate in after-school sports either by choice or lack of financial resources. For these youth, physical education class played a significant role in providing a consistent source of opportunities for learning how to be physically active.

Variety and fun were attributed to a positive physical education experience and were expressed by statements such as, “Every day we have a different warm-up, run laps and that makes phy-ed class more fun.” Another young female participant stated the following, “I love phy-ed, we play with parachutes, indoor baseball, and every week we get to play a new game,” “Give more options, like more things to pick from, change it up so it is not the same thing every day.” These descriptions of variety and fun as being important components in a positive physical education experience carried into other settings outside of physical education class where physical activity occurred.

The opportunity to try new games and sports in a safe and supportive environment was an important aspect of a positive physical education experience for the participants. The availability of rules and structure with an emphasis on good sportsmanship and skill development gave them a sense of safety that it was okay to make mistakes while engaging in something unfamiliar for them. One participant explained how she learned soccer. “I was not very good at first, but we kept playing it in phy-ed and I really learned to like it the more we played it and I got better at it.”

During the interviews, participants made reference to the unique and non-traditional activities and games they experienced in a prior community program. The youth described these particular activities and games as being some of their favorite because they offered new and
creative ways of moving around and having fun. The use of non-traditional physical activities can offer both teachers and students an expanded definition of physical education that Tyler and Johnson (2016) discuss in the literature. This proposed secondary definition of “physical education” is led by an emerging paradigm that redefines physical education by highlighting that learning can and does occur wherever and whenever students engage in some form of physical activity, which makes it more connected with physical education than previously recognized (Tyler and Johnson, 2016).

A sense of structure and organization during physical education class played important roles in providing positive physical education experiences for some of the participants. Four out of the five youth in this study were of low-socio-economic status and had experienced issues of family instability and poverty that may have given them a heightened awareness and perception of a structured environment which was discussed in the study by Humbert (2006). For two of the male participants, structure was associated with a sense of fairness while engaging in a competitive physical activity. If these participants perceived the teams as mismatched in ability or there was some sort of ruling that did not go in their teams favor, such as a questionable foul in a basketball or soccer game, they felt that the experience was negative. One of the female participants expressed her dislike of bad sportsmanship stating that, “bad sportsmanship makes it not fun,” and that it was the physical education teacher’s job to make sure that everyone was showing good sportsmanship.

While interacting directly with the participants during physical activity, the instructor of the summer program, attempted to create a structured and fair environment by being the one who picked teams so none of the participants felt left out which has been described as a significant
factor for a negative physical education experience (Stein, 1991). It was also important to the participants that they had fair playing time while engaging in a team activity. The researcher was attentive to this request and acknowledged it by rotating participants in and out of the games at selected intervals to provide structure and organization and a sense of fairness, which was also suggested by Stein (1991).

Physical education class as an avenue for the healthy release of pent up frustration and anger in a positive and meaningful manner was how one eleven year old male participant perceived and defined his positive physical education experience. This young male participant shared his that personal academic struggles in math, science and social studies interfered with his ability to be physically active at home because he had to do homework before he was allowed to play outside. Physical education class was described as a place where he felt like he knew what he was doing and did not have to struggle. At one point in the interview, he looked down at the floor with a look of frustration on his face and said, “School sucks.” For this participant, physical education class and physical activity outside of school served a therapeutic role in his life, similar to what Halpern (2009) described in his report on how some forms of physical activity appear to have self-regulatory benefits for behavior and emotional state that foster social inclusion and strengthen a child’s sense of self.

For one participant in the study, a sense of achievement and success was perceived and defined as attributes of a positive physical education experience. He was very proud of the fact that he had never received a negative mark in physical education class for non-participation like many of his classmates, and he always received A’s in gym class. In the interview, he shared that his mother was a former Division 1 swimmer and an optometrist, and that his father played
several sports in school and owned his own business. The socio-economic status of this participant’s family perhaps provided him with a different outlook on the role physical activity played in his daily life as compared to the other participants in this study who came from a low socio-economic background. For this participant, physical education was perceived, defined and connected to achievement and social status reflected by his family environment.

This particular participant spoke in the interview of how much he enjoyed the feeling of being tired and sore after physical education class because it made him feel like he pushed himself. He states, “Hopped up kickball is really tiring and I like how I am sore afterwards because I know that I pushed myself.” He went on to further compare his performance with other students by saying, “A lot of people walk around phy-ed and do not really try. They never really push themselves in anything.” For this participant, physical education was used as a measuring stick to compare his efforts and achievements to others. In an article on social-economic status and its effects on youth physical activity levels Humbert, et al; (2006) discuss how youth of high socio-economic status perceive physical education class as a type of battleground for determining a physical and social “pecking order.” This can occur by the formation of team leaders and captains, who pick other players based on athletic ability and popularity which has been reported as one of the top three negative physical education experiences by youth (Cardinal, 2013).

The theme of positive physical education experiences shared by the participants in this study express how they value the time spent in physical education class and the influence that it has on their physical activity that occurs outside of physical education class. Learning the
fundamental skills, rules and proper sportsmanship of a variety of sports and activities develop
the foundation for a meaningful and lifelong relationship with physical activity.

**Self-Efficacy**

The theme of self-efficacy emerged from the analysis of the interviews and was described by participants as having a genuine belief that they were capable and competent of performing physical activity and had a willingness to explore new and unfamiliar physical activity experiences. For one of the female participants, self-efficacy was communicated as her past and present feelings of confidence towards participating in and trying out for team sports. This participant had disclosed how she had made it onto every team that she tried out for, and had never been cut, and had plenty of playing time. She also expressed aspirations trying out for the dance team, but shared her concerns how cheerleaders were perceived negatively by other students. She stated, “*Getting on the cheerleading team would be easier than other teams, but I don’t want to join because everyone hates the cheerleaders.*” Perhaps as an adolescent, this participant’s perceptions of physical activity take on new meanings that are tied to her self-identity and social status as described by Halpern (2008). This participant may also be describing what Festinger (1957) refers to as cognitive dissonance, which is having inconsistent thoughts, beliefs or attitudes as relating to behavioral decisions and attitude changes. In the example of trying out for the dance team, this participant may have had a genuine desire to engage in the new experience of being on the dance team, while simultaneously feeling conflicted about her involvement due to her past negative attitudes and beliefs associated with the activity.

One of the male participant shared a similar experience of self-efficacy related past success in team sports. This participant had already been participating in sports year round, but
was persuaded by a friend to join wrestling, which he had never done before, except for horseplay with his friends in an unstructured setting. When asked to describe his thoughts on his first season of wrestling he shared, “Like I don’t really know how to wrestle, I wasn’t able to take anyone down, but it was still fun. Perhaps due to this participant’s past success in team sports and going through the effort of learning new skills enabled him to transfer his past experience over to joining the wrestling team. Another participant stated, “trying something new would be a fun thing to do and if you start doing it then you might end up liking it and you will like figure out how to play it and stuff.” It is interesting and worth noting that both of these participants communicated that fun was paramount in their willingness to engage in new physical activities which was also characteristic of participants’ positive physical education experiences.

Another experience of self-efficacy shared by one of the male participants was in describing how he learned to downhill ski. He made reference to having a growth mindset that assisted him in meeting new challenges. When asked to clarify growth mindset, he went on further to explain that growth mindset was taught to him in school and was about how to think about approaching difficult tasks and challenges. He defined growth mindset as, “I learned the growth mindset in school, letting things come in and overcoming things; it is like saying that something is not possible, it is just hard for you.” The growth mindset described by the participant in this study appears to share similar characteristics of self-efficacy and was applied in a similar manner to succeed in accomplishing the task of learning to downhill ski. He recounts the experience: “I went on a skiing trip and that was not easy for me because I had to turn a lot and I did not use my legs right. I kept on pushing on the wrong leg. I figured it out and was able to go on the ski lift.”
The willingness to engage in physical activity independently was revealed in participants’ perceptions of self-efficacy and was expressed by one participant saying, “sometimes my friends are not around so if I want to be active, I have to make up my own thing.” Other demonstrations of independence included participants’ examples of finding creative and innovative ways to fulfill their desire to be physically active even when their friends or family members were not available to participate in physical activity with them. One of the participants gave the example of practicing cartwheels off of her bed and another participant gave an example of practicing shooting baskets in his room with a nerf basketball set. The participants also shared examples of independently forming their own unique games that utilized the available environment around them. A few of the participants had access to large outdoor spaces where they resided, and utilized them to play unique games, including a game similar to hide and seek in the dark called ghost in the graveyard and using the nearby cornfields as a maze.

During one of the interviews, one of the participants changed the course of the conversation about creative ways to be physically active and discussed issues of food insecurity that she experienced at home. The researcher was familiar and experienced in addressing the topic of food insecurity and had known this participant for nine months prior to the interview, which allowed a level of comfort for the following discussion that occurred between the researcher and the participant:

Researcher: “What do you think life will look like when you are older and can do things your own way?” Participant: ” I don’t know, I just see myself maybe having a singing career.”
Researcher: “When you watch shows like America’s Got Talent, what are you thinking?”
Participant: “I am just thinking that maybe that will be me someday, and maybe I will be able to go up on the stage and they will pick me.” Researcher: “Hmmm – interesting, so if you had the opportunity would you take it?” Participant: “Yes.” Researcher: “What if worked out?” Participant: “I would be really happy.” Researcher: “How would something like that affect the family?” Participant: Long pause – “I don’t know, I would probably have to travel away from home sometimes, probably.” Researcher: Long pause – “Huh, interesting. That’s really interesting. Keep dreaming big. I see it happening for you.” Participant: “Yep.”

The above discussion surfaced from within the initial discussion of the participant’s expression of her competence and capabilities related to physical activity. This inner turmoil and struggle with food insecurity was being met with the competence, resilience, and sense of independence shaped through her physical activity experiences.

**Sedentary Behaviors**

The theme of sedentary behaviors emerged from the analysis of the interviews, revealed as participants having a strong desire to watch television, You Tube, play video games, and engage in social media between the hours of after school and supper, and on the weekends. Participants described their level of participation in sedentary behaviors was influenced by a range of circumstances including homework, chores, after-school sports and access to different forms of media.

Sedentary behaviors after school are common because during these hours, youth have discretion as to how they use their time, freed from the constraints of school. One of the participants described his typical after-school routine stating, “*When I get home from school I usually sit inside the rest of the day, eat snacks and watch You Tube.*” He enjoyed watching You
Tube and explained that it was a really cool place to learn stuff he was interested in and particularly enjoyed watching a channel that showed strategies for getting higher scores on his favorite video games. Other participants described participation in sedentary activities as well. “When I get home from school I stay in the rest of the day and watch TV for 4 hours.” “Sometimes I will go outside and play with my friends, though I usually stay inside if there is a really cool video I am watching.” “It is usually on the weekends that I just sit inside all day watching You tube and play video games.”

The amount of time given to homework after school played a significant role for one of the older participants, as she reported spending an average of one to three hours per evening during the week on homework, thus limiting her time for physical activity. She further explained that taking breaks from homework to go outside for a run or a walk with a friend was a way to clear her head, concentrate and give her energy to continue doing her homework. This participant’s experiences of physical activity enhancing her academic performance are consistent with a growing body of research focused on the association between physical activity, including physical education, and academic performance among school aged youth (Tarasenko, 2015). This developing literature suggests that physical activity may have an impact on academic performance through a variety of direct and indirect physiological, cognitive, emotional, and learning mechanisms (Tarasenko, 2015). Further research on brain development indicates that cognitive development occurs in tandem with motor ability (Hamilton, 2007).

One of the male participants expressed his strong dislike of school as a result of having learning disabilities that created a negative attitude towards school and homework. This participant’s parents would not allow him to play video games or watch movies until he
completed his homework. This participant expressed that he enjoyed spending large amounts of
time by himself playing video games and watching television in his room when he did not feel
like playing with his friends or when he wanted to get away from his siblings. This participant
also shared that because of his difficulties in school, he felt that he was not as smart as other kids
his age, but that he was better than them at sports and video games. He stated, “I am like way
faster and stronger than a lot of the kids in my class, but they are better at learning stuff, except
for video games. I can beat almost everyone in class.” This participant took pride in being good
at playing video games and indicated that it took a lot of practice to get high scores and that
sometimes he chose to spend his time improving his performance on video games as opposed to
playing with his friends or siblings. For this participant, engaging in sedentary activities such as
playing video games appeared to serve a relevant purpose in that it gave him a sense of pride and
increased his self-esteem.

One of the male participants reported that he was able to watch television and play video
games only after he completed his after school chores. This participant lived on a small hobby
farm and was responsible for feeding and watering animals seven days per week. Completing
chores was a functional form of physical activity for this participant as he explained how he had
to carry hay bales, buckets of grain, water and clean the barn using a wheelbarrow and a shovel.
This participant reported that he was not involved in any organized sports after-school because
he did not want to be on a school team, but, instead preferred to participate in unstructured “pick-
up” games with friends and neighbors. After completing his after-school routine, this participant
enjoyed playing video games on his X box stating, “I like to come inside after doing chores and
play X box in my room before supper.”
Two of the participants discussed how extra-curricular activities greatly limited the amount of time they were able to watch television, surf the internet and communicate on social media sites. One of the participants stated, “I spend between 1.5 to 2.5 hours per day right after school because I have sports in the evening, church on Wednesdays and wrestling and basketball the other nights of the week.” Another participant stated, “Volleyball practice and games take up a lot of my weeknights, and I still have to find the time to do my homework, so most of the time I catch up on my favorite Netflix shows on the weekend.”

Differences in access to television, computers and video games emerged in the interviews with participants as a factor influencing how much time they were allowed to participate in such activities. All five of the participants reported that there were one or more televisions and at least one digital game console in their home and three out of the five participants had a television in their bedroom. According to Hersey and Jordan (2007), eighty-eight percent of American household have a television and digital game console such as Sony PlayStation, Microsoft Xbox, and Nintendo GameCube. Eighty-five percent of children also have access to computers at home (Hershey & Jordan, 2007) and over ninety percent of those play digital games on their computers (Chapman & DeBell, 2003).

**Family Support**

The theme of family support emerged in the analysis of the interviews reflecting family members of the participants serving as role models for living a physically active lifestyle. Family members also provided emotional and financial support that encouraged participants to pursue opportunities to be physically active. It has been suggested that family is one of the most important influences on children’s physical activity and sedentary behaviors, with only
biological factors and children’s attitudes on physical activity considered more significant (Quarmby et al; 2011).

Within the family structure, siblings can serve as role models. Just like parents, it is important that older siblings participate in play and physical activity with their younger siblings. One participant expressed with great sadness the loss he felt when his older sister moved out of the house and was no longer able to play basketball with him and his younger brother. Older siblings can provide opportunities to pass on their experience to younger siblings and foster skills to be successful in athletics and other endeavors, along with providing moral and emotional support. It can be emotionally difficult and even affect the motivation to be physically active when an older sibling moves out of the home and the mentoring role is not filled by another source of support.

Positive family support for being physically active for one of the participants was experienced as being able to participate in physical activity both directly with his mother and through after-school sports programs. He stated, “I go to the gym and workout with my mom sometimes, and I also play a lot of different sports after-school.” This participant’s physical activity was reinforced through multiple influences which seemed to impact his long-term physical activity behavior. This same participant shared a similar example of receiving support from his father. He explained that they heat their home with wood during the winter so he and his dad spent a lot of time on the weekends in the summer and fall chopping wood together. The participant went on further to share that his father was very busy and that he really looked forward to their time together in this activity.
Another male participant shared how he and his father cook breakfast together on the weekends as a way to spend time together. This participant’s father worked third shift on the weekends so it was not always possible for him to participate in physical activities during the day because he was sleeping. This participant stated, “My dad plays football and basketball with us when he isn’t too tired from his night job.” Although cooking breakfast may not be considered a traditional physical activity, nonetheless, it was an example of quality time spent together between father and son that provided the benefit of emotional support. This participant reported that he would play outside with his siblings and friends when his dad was sleeping, so it did not appear to negatively influence his physical activity levels.

Two of the female participants perceived positive parental support for their participation in physical activity in the forms of tangible aid and emotional support. One of the female participants disclosed that her family struggled financially, so it was very difficult for her parents to enroll her in the extra-curricular activities that she was interested in. She shared an example of how her dad made an extra effort by working on the weekends so she could join soccer. She stated, “I really wanted to join soccer in the summer, but we didn’t have the money. Our stepdad works on the weekends sometimes. It depends if we need the money or not for extra things that we want to do.” Socio-economic status can act as a barrier to physical activity for low-income youth by limiting their choices and opportunities to participate in school sports and extra-curricular activities. The cost of enrolling in after-school sports and other extra-curricular activities has risen steadily over the years, placing an additional burden on low-income families.

One of the older participant’s conveyed that her mother provided a great degree of emotional support for being physically active and encouraged her to live a healthy lifestyle and
maintain a healthy weight. The participant shared that her mother worked out at home a lot and that she wanted to follow in her mother’s footsteps. These perceptions of influence are consistent with a study of rural youth by Trost et al. (1997) that reported the perception of the mother’s activity level was found to be a significant facilitator for girl’s participation in vigorous physical activity. The participant in this study enjoyed running along with being on the school volleyball and church softball team. Two of the other participants explained that they would engage in being physically active with or without their parent’s participating alongside them. One of the participants stated, “It doesn’t really matter if he plays with us or not, I am still going to do it anyways.” Perhaps the importance of parental involvement would have been significant if the participant did not have any siblings or friends who lived nearby to engage in physical activity with.

Discussion

This study sought out to explore how rural youth perceive, experience and make meaning of physical activity in their daily lives. Through individual interviews, there were four themes that emerged in the analysis of the data that described their experiences. The first theme was positive physical education experiences. The participants expressed the important role that physical education class played in their daily lives. For some of the youth in this study, physical education class was their primary source of daily physical activity and opportunity to learn and participate in a variety of games and sports. It was especially important to the participants that physical education class was fun and well-structured, which in turn, provided a safe environment for trying new forms of physical activity. Physical education class also offered an appropriate environment for venting pent up stress and frustration that often accompanied the participant’s
lives at home. Finally, physical education class was perceived as a way of measuring success and achievement by comparing ones physical abilities to others through competitive activities.

The second theme that emerged was self-efficacy. The participants described this theme as having a genuine belief that they were capable and competent of learning and performing physical activity. This sense of self-confidence gave them a willingness to take a risk in exploring new and unfamiliar physical activity experiences. Self-efficacy also enabled the youth to become intrinsically motivated and self-governing towards being physical active through creating and developing their own games and forms of physical activity. Most noteworthy with the emergence of this theme was how the self-efficacy that was developed through a sense of physical competence was transferred to other domains and contexts of the participant’s lives.

The third theme that emerged was secondary behaviors. The participants described this theme as having a strong desire to watch television, You Tube, play video games and participate on social media sites. The amount of time devoted to sedentary behaviors varied from participant to participant due to various factors. There is a current paradigm in physical activity research that views sedentary behaviors as one of the primary factors for negatively impacting youth physical activity levels. The research supporting this premise first emerged from the Harvard Medical School at the start of the 21st century, where TV viewing time was found to be strongly associated with the risk of Type 2 Diabetes in adults and youth, independent of physical activity (Hu et al; 2003). This emerging research has led some researchers to re-examine how much physical activity is recommended to offset the negative impact of sedentary activities. All of the youth in this study reported spending significant amounts of time being both physically active and sedentary. For these youth, spending time in sedentary activities did not appear to be a deterrent to being physically active, but rather were a normal part of their daily lives. Between
their time being spent at school and other obligations, the participants conveyed that they felt like their time was not their own. Having the freedom and ability to determine how they spend their free time provided a sense of autonomy and independence. The youth in this study also shared that the way their families often spend quality time together is by watching television and playing video games together. Some of the participants discussed how their parents had to work long hours at multiple jobs in order to meet financial obligations that often left them feeling too tired to participate in physical activity directly with them. Rather, the parents often chose to spend their available time with their children in leisure activities. Lastly, for one youth in this study, being successful at video games helped him cope with his negative feeling towards school due to performing poorly in certain subjects.

The final theme that emerged was family support. The participants described how family members contributed in their ability to be successful in leading a physically active lifestyle. Family support for physical activity occurred in the form of emotional support and financial support. One example of emotional support occurred when participants and family members spent meaningful time together in various activities such as cooking breakfast, exercising side by side and chopping wood together. These types of shared experiences with family members had the ability to create positive, lifelong memories associated with physical activity. Emotional support was also demonstrated through the experiences of the participant’s younger siblings serving as playmates and older siblings serving as both playmates and role models. The far-reaching impact of a sibling could be felt when a young participant expressed the loss he felt when his older sister had moved out of the house and was no longer present on a daily basis to play basketball with him. Finally, financial support by the parents of the participants contributed to the quality of physical activity experiences the participants were able to take part in. Most of
The participants in this study were experiencing the challenges of living in poverty with limited resources that restricted their ability to take advantage of many of the opportunities that children of higher socio-economic status are able to.

**Summary**

The results and findings of this study reflect the similarities and differences in the review of the literature. The themes that emerged in this study coincide with the multiple levels of influence that are within the framework of the social-ecological model. The themes of positive physical education experiences, self-efficacy, sedentary behaviors and family support that created the story of the participants’ perceptions, experiences and meanings of physical activity were the facilitators and barriers reported in the literature. The findings in this study are particular to this specific sample of participants and not to be generalized to other populations, however, these results have implications for the audiences connected with the participants.
Chapter Five

Summary and Conclusions

Significant Findings and Implications

A phenomenological design was adapted to explore ways in which rural youth perceive, experience and make meaning of physical activity in their daily lives. Four overarching themes emerged from the analysis of the data: positive physical education experiences, self-efficacy, sedentary behaviors and family support. Each of these themes offered meaningful and substantial insights into the lived experiences of the participants in this study. I next discuss the findings and implications of this study ideally informing those who are entrusted to further advance the ongoing efforts of promoting and improving youth physical activity participation.

Physical Education Professionals

The youth in this study experienced the challenges of rural poverty, which could limit their options to participate in certain physical activity experiences outside the school environment. Due to these limitations, it is imperative that physical education teachers and physical activity leaders understand the implications of creating positive experiences for the youth that are in their care. Through the interviews, it was revealed that there was a certain level of expectation for the physical education professionals to offer a structured and progressive approach to teaching physical education. The youth in this study confirmed that positive physical education experiences in the school setting can act as a solid foundation for supporting a life-long appreciation of physical activity as they move into their adolescent and adult years. Thus, early interventions should play an important role in the battle against physical inactivity.

These positive experiences of physical education may even have the potential to cross generation lines as these youth may someday have children of their own. Their past recollections
of the positive role that physical education played in their lives may later influence them to support the efforts of their own children’s school in providing a comprehensive physical education program. It is important to emphasize that physical activity leaders and physical education teachers employed in low-income environments are able to implement fun and variety into their curriculum’s while maintaining a concern for budgetary restraints. None of the activities that were described as fun mentioned by the participants were expensive, demonstrating that fun physical activity experiences can be implemented even under the constraints of a limited budget.

Although it is beyond the scope of this study to suggest specific policy recommendations surrounding physical education time in schools, the voices of the participants in this study speak for themselves the high value they place on physical education in their daily lives. The years and hours spent in physical education proceed quickly for youth and cannot be reciprocated once they have past. As youth get older, and move into their adolescent years, their lives become more socially complex and physical education and physical activity often plays a lesser role in their lives. This is especially concerning for the youth in this study that have low physical activity levels outside of physical education class.

For some of the participants in this study, their past positive experiences of physical education may carry-over into their adolescent and adult years through continuing to be involved in competitive and non-competitive sports and other physical activities. This demonstrates that even a minor dose of positive and meaningful physical education may encourage those youth who may not have access, interest or support to pursue physical activity outside of school, to find ways to pursue physical activity on their terms and within the circumstances they reside.
Community Program Leaders

The misunderstandings and preconceived assumptions of rural poverty were perhaps the most enlightening aspects of this exploratory study. As someone whose daily work involves serving as an advocate for underserved, low-income populations, I sincerely believe my prior education and training related to poverty allowed me to build trusting relationships with the participants. Through these relationships, the participants helped me to realize that poverty does not mean helplessness, but instead, means finding alternative avenues to obtain necessary resources.

Many youth physical activity interventions in rural communities center around the notion of building and providing better access to walking trails, parks, recreation centers and playgrounds (Belansky, 2013). Although well intentioned and conceptually makes sense, the “build it and they will come” approach may not be economically suitable nor even necessary for rural communities to be successful in increasing youth physical activity levels. What purpose does it serve a community to have a surplus of underutilized playgrounds, recreational centers and parks? It is similar to having a surplus of health clubs, gyms, and recreation centers on every corner in many parts of the country while there is still a low percentage of the population that utilizes them. If community leaders need to address a shortage of facilities, exploring the use of existing community sites such as schools and churches, is a more cost-efficient solution than building new facilities. Another benefit of utilizing existing community sites, is that it offers the opportunities for new relationships and partnerships to be developed with strengthens a community.

In the experiences shared by the youth in this study, they did not express discontent due to a lack of facilities, parks and other open spaces to be physically active. In fact, the resources
related to youth physical activity are not necessarily expensive in the sense of physical costs; however, they are very costly in terms of human capital due to the self-sacrifice, time and commitment of others. After-school and community-based programs play a critical role in buffering the effects of rural poverty for children (Halpern, 2009), nonetheless it is not enough to just implement a program for underserved youth, and expect it to be sustaining and impactful. The program must be well thought out, well intentioned, with clear roles and mutual respect between team members. When community program leaders implement and achieve these objectives, their interventions will be better equipped to address the specific needs for the youth in those programs.

Finally, when community leaders are considering programming interventions for youth physical activity in their communities, it is crucial to bring many different voices to the table. Collaboration and input are needed from school administrators, public health agencies, members of the faith-based community, business leaders, and most importantly, the voices of the youth themselves.

**Recommendations for Future Research**

My recommendations for future research are based on an optimism that they will one day be part of a momentous paradigm shift in the field of youth physical activity research. Thomas Kuhn (1970), popularized the term paradigm in his classic work, “The Structure of Scientific Revolutions.” Kuhn (1970) defines a paradigm as a worldview that is essentially an interrelated collection of beliefs and set of agreements about how problems are to be understood. The way problems are defined, in large part, determines the nature of the strategies designed to solve them. Physical activity is a behavior that is established in normal science with its own set of theories, models and agreements that have created its own unique paradigm. Kuhn (1970)
explains that scientific revolutions occur as a result from a breakdown of the prevailing paradigm. This occurs through emerging inconsistencies, anomalous findings, and alternative viewpoints promise greater understanding. As these anomalies continue to increase, they reach a breaking point or crisis that creates a new paradigm. This new paradigm will offer new directions, focused attention, and methods to support the new paradigm.

During the course of this study, new perspectives and insights emerged that could contribute to the future direction of youth physical activity research. Firstly, it is recommended that there be a continuation of studies employing the framework of the social-ecological model to further add to the rich body of research supporting the effectiveness of multilevel interventions. Alongside adding to the body of research, further studies should be seeking emerging influences on physical activity that have not yet been studied. The social-ecological model (Sallis, 2009) is particularly well-suited for studying physical activity in rural areas because physical activity is done in specific places. Studying the characteristics of places that facilitate physical activity is a priority. Further qualitative studies of diverse subpopulations in rural areas need to be supported to better understand how youth experience physical activity in different contexts. This may include exploring the experiences of overweight rural youth, minority’s, and rural youth from single parent families, etc.

Further studies exploring rural youth’s perceptions and experiences of sedentary activities could advance and reshape how the field views these behaviors and their relationship to physical activity. The current paradigm views sedentary behavior and physical activity as antagonistically opposing one another (Yates et al; 2011); however the area of physical activity research has been energized by the idea that sedentary behavior is a new, distinctive paradigm within itself (Yates et al; 2011). This new paradigm emerged from research suggesting that
incorporating the recommended amount of physical activity into an otherwise sedentary lifestyle does not fully mitigate the risks associated with sedentary behavior (Healy et al; 2008). These findings could lead researchers to ask how much daily physical activity is necessary for youth to overcome the effects of being sedentary. Further findings could lead to an entirely new set of physical activity guidelines and recommendations from policy setting agencies such as the Center for Disease Control, Department of Human Services, and National Institute of Health.

Finally, physical activity researchers should be compelled to advance the efficacy and integrity of qualitative methods in the field of physical activity research as a standalone approach, or in conjunction with quantitative methods. This will ensure that there is a broad landscape of progressive perspectives while staying true to the conviction of giving youth a voice in matters that concern them.
Conclusion

Decreasing physical activity levels, particularly among youth, continue to be a priority health concern in the Unites States, and youth living in rural areas encounter unique facilitators and barriers to physical activity. In addition, past studies suggest that overweight and obesity rates are higher for youth in some rural areas compared to urban areas (Leipert, 2012). Identifying the factors related to youth physical activity is important, as such information can provide insight to efforts aimed at increasing the number of youth who meet health-related physical activity guidelines. Regardless of the social-economic status of youth, intrapersonal and social factors that influence physical activity should be considered.

This phenomenological study attempted to capture firsthand, how a small group of youth living in rural poverty perceive, experience and make meaning of physical activity in their daily lives. The social-ecological model was employed as a framework for guiding the study and providing a sense of structure to explore the complex nature of youth physical activity. Through their voices, the participants collectively expressed four meaningful themes associated with their perceptions and experiences of physical activity: Positive physical education experiences, self-efficacy, sedentary behaviors and family support.

It is becoming increasingly important to understand physical activity from the perspective of rural youth. The implications of this information for rural communities, physical activity researchers and community leaders are significant. These implications may help facilitate increased participation in physical activity for rural youth by providing them with enhanced opportunities and resources to engage in physical activity. Further research is needed to explore the perspectives and experiences of other rural youth to gain additional insight and understanding into the complex nature of physical activity behavior. Opportunities for physical
activity exist in rural settings, but changing physical activity behavior without access to appropriate resources is difficult. Overcoming norms that hinder physical activity requires an in-depth knowledge of the community, which can only be gained by spending time learning about the members that comprise the community. Developing partnerships and leveraging local resources may be essential to overcoming barriers for physical activity promotion in rural areas. Involvement of church leaders, school officials, health care workers, and cooperative extension is likely needed to establish and sustain youth rural physical activity programs. Allocating resources to existing community personnel and volunteers for continuing education may be valuable.

Upon reflection on this endeavor, the researcher was reaffirmed that physical activity forms the basis for how the self is composed and expressed, how learning occurs, and how youth explore and master the world.
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Appendices

Appendix I
IRB Approval Letter or Email

file:///C:/Users/joh12982/Desktop/Correspondence_for_STUDY00001392-1.pdf

Phone Call Script

Program Director: Hello [Parent’s Name]. This is Julie Samuelson with the Summer Food and Fun Program. Is now a good time to talk?
    If No: When is a more convenient time for me to call?
    If Yes: (Continue)

Program Director: I am calling today to let you know about an opportunity for [Student’s Name] to participate in a research study being conducted by Jimmie Johnson, a graduate student at the University of Minnesota Duluth who is exploring rural youth’s perceptions and experiences of physical activity. I have identified [Student’s Name] as a participant who I think might benefit from participation in this study.

As part of the study, [Student’s Name] would participate in an interview to ask about his/her experiences of physical activity in the Summer Food and Fun Program. The interview will take place at Zion Lutheran Church in Pine City for about one hour to one hour and fifteen minutes. The research study will include the collection of basic demographic information. Your child would receive a $25 gift card as a token of appreciation for taking the time to complete the interview.

I wanted to call to see if you had initial interest in this opportunity for your child. If so, I can provide the researcher with your contact information so he can explain the study in more detail and answer any questions you may have. Would it be all right if I provided him with your contact information?
    If No: Thank you for your time.
    If Yes: Thank you for your time. Mr. Johnson will be in touch soon with additional information.
Title of Research Study:

Supported By:

Why am I being asked to take part in this research study?

What should I know about a research study?
It is important to know that this study is voluntary and you are under no pressure to participate. If you do decide to participate you should know that every measure will be taken to protect your privacy and your rights as a participant.

Who can I talk to?
In the event that you need to speak to someone regarding the study, you can contact

<table>
<thead>
<tr>
<th>Researcher Name:</th>
<th>Study Staff (if applicable):</th>
</tr>
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<tbody>
<tr>
<td>Researcher Affiliation: Minnesota-Duluth</td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td>Phone Number:</td>
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<tr>
<td>Email Address:</td>
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</tbody>
</table>

This research has been reviewed and approved by an Institutional Review Board (IRB) within the Human Research Protections Program (HRPP). To share feedback privately with the HRPP about your research experience, call the Research Participants’ Advocate Line at 612-625-1650 or go to https://research.umn.edu/units/hrpp/research-participants/questions-concerns. You are encouraged to contact the HRPP if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

Why is this research being done?

How long will the research last?

How many people will be studied?

What happens if I say “Yes, I want to be in this research”?

What happens if I do not want to be in this research?
You can leave the research at any time and it will not be held against you. Instead of being in this research study, your choices may include reading online articles of your choice.
**What happens if I say “Yes”, but I change my mind later?**
You can leave the research at any time and it will not be held against you. If you decide to leave the research, contact the researcher so that she can remove your data collected to the point of your withdrawal.

**What happens to the information collected for the research?**
Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this institution.

**Will I have a chance to provide feedback after the study is over?**
The Human Research Protection Program may ask you to complete a survey that asks about your experience as a research participant. You do not have to complete the survey if you do not want to. If you do choose to complete the survey, your responses will be anonymous. If you are not asked to complete a survey, but you would like to share feedback, please contact the study team or the Human Research Protection Program (HRPP). See the “Who Can I Talk To?” section of this form for study team and HRPP contact information.

**Will I be compensated for my participation?**
If you agree to take part in this research study, we will pay you $10 immediately after the posttest for your time and effort to complete both the pretest and the postest. Those who complete only the pretest will receive $5. If you do not complete the pretest, you would not be asked to complete the posttest.

**Consent Statement**
There is no written documentation of consent requiring your signature. As an online survey questionnaire, please select the option below to indicate your consent to participating in this study:

- The purpose and nature of this research have been sufficiently explained and I agree to participate in this study. I understand that I am free to withdraw at any time without incurring any penalty. I understand that I may print this page for my records.

I decline to participate in this research. I understand that this survey will close and I will not receive credit or payment for declining to participate [Then this will skip to the end]
Appendix II

Instruments, Interview Protocols, or Survey Questionnaires

Interview Protocol

Welcome _______, and thank you so much for taking the time to meet with me today. The reason why we are talking today is for you to share your thoughts and stories about what physical activity means to you. It is really important that you understand that there are no right or wrong answers to the questions that I am asking. This is not a test of any kind. You probably noticed the recorder here. I am recording the session because I do not want to miss anything that you say. My job is listen and let you talk. Let’s begin. Would you like to press the record button?

Interviewer will receive assent from student and consent by parent/legal guardian for this study.

Individual:
What kinds of physical activities do you like to do the most?
What else might count as physical activity?
Do you participate in sports or other activities? Which ones?
Doctors tell us that is good to exercise and be physically active, why do you think they tell us that?
Are there times you are more physically active than others? Why or why not?
How many hours per day do you spend watching TV, You tube and social media?
What are some things that make it hard to be physically active?
How do you make PA fun?
What makes it not fun?
Would you participate in a sport or PA that you were not good in? Why or why not?

Social
What is your family like? Divorce? Who you live with? Visitation Schedule?
How do you think your family arrangement affects being physically active?
How does your family spend time together?
What happens on weekends?
Who are you physically active with?
Mother or father engage in PA with you? Siblings?
Are there any people you look up to who are healthy and physically active? Who? Why?
How important are friends for being physically active?

Environmental
What types of places make you feel like being physically active?
What types of places make you feel like not being physically active?
If you were the one in charge of physical activity for kids your age, how would you do it?
On behalf of Hands for Pine City, I want to express our support for your research project titled: 
**An Exploration of Rural Youth’s Experiences and Perceptions of Physical Activity**

Hand's for Pine City’s mission is to exist to be the hands of Jesus to Pine city. To achieve this mission, Hands for Pine City is committed to facilitating Summer Food & Fun youth program.

We commit to supporting participant recruitment through our Summer Food & Fun team. We will contact the students and families involved encouraging them to participate. We thank you for your work in Summer Food & Fun and give our strongest support for your proposed research.

Sincerely,

Julie Samuelson
Pastor
Hands for Pine City