HOW URBAN AFRICAN AMERICAN ADOLESCENT GIRLS SURVIVE IN SPORT:
THE INFLUENCE OF PERCEIVED INTRAPERSONAL, INTERPERSONAL, ENVIRONMENTAL,
AND SOCIOCULTURAL FACTORS

By

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ABSTRACT

HOW URBAN AFRICAN AMERICAN ADOLESCENT GIRLS SURVIVE IN SPORT: THE INFLUENCE OF PERCEIVED INTRAPERSONAL, INTERPERSONAL, ENVIRONMENTAL, AND SOCIOCULTURAL FACTORS

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The goal of this study was to address the barriers experienced by African American adolescent girls who were engaged in sport in urban areas and how these girls who continued participation overcome the barriers. This study also sought to better understand the components of quality sports and physical activity programming that will engage and encourage continued participation among this population. Qualitative methodology in the form of focus group interviews were used for this descriptive study. Participants consisted of 13 African American adolescent girls between the ages of 13 and 17 in grades 9 through 12 who were participants in an organized Amateur Athletic Union (AAU) volleyball program in an urban environment. A social ecological framework was utilized and findings revealed that intrapersonal, interpersonal, environmental, and sociocultural factors were significant in influencing sport and physical activity participation. Results revealed a number of challenges and barriers to sport participation including concerns regarding image, identity related issues (race/gender), criticism from significant others, resources and access limitations, lack of skills and ability, and the negative influence of coaches. Strategies and support systems utilized by girls in this study included the positive influence and support from others, exhibiting persistence and determination, navigating image concerns, and possessing a positive attitude and high levels of confidence. Professionals that work with adolescents need to have an
understanding of the relationships among the personal, social, cultural, and environmental factors girls experience and use this knowledge in designing and implementing interventions that will best serve this population. Implications for program development included providing opportunities that are fun and offer a variety of activities, are gender specific and culturally relevant, and have African American females in coaching and administrative positions to serve as role models.
This dissertation is dedicated to my lovely mother, Mary Cox, who always went above and beyond in providing me with support, encouragement, prayer, a caring ear, and a constant "gentle" nudge on my LONG journey to complete this program. I am forever grateful for your loving guidance and I know you are proudly looking down on me. Love you!!
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# TABLE OF CONTENTS

LIST OF TABLES.............................................................................................................................................. ix

LIST OF FIGURES........................................................................................................................................... x

CHAPTER 1
INTRODUCTION................................................................................................................................................. 1
  Statement of the Problem.............................................................................................................................. 1
  Theoretical Framework................................................................................................................................. 4
  Purpose...................................................................................................................................................... 7
  Research Questions.................................................................................................................................. 8
  Significance.............................................................................................................................................. 9
  Summary.................................................................................................................................................. 10

CHAPTER 2
REVIEW OF LITERATURE............................................................................................................................... 12
  Introduction............................................................................................................................................... 12
  Girl’s Participation in Sport and Physical Activity..................................................................................... 12
  African American Girls in Urban Areas.................................................................................................... 15
  Barriers to Sport and Physical Activity for Adolescent Girls................................................................. 16
  Theoretical Framework............................................................................................................................... 20
    Social Ecological Models....................................................................................................................... 20
    Bronfenbrenner’s Ecological Systems Theory..................................................................................... 20
    Social Ecological Model Variations...................................................................................................... 22
    Framework for this Study...................................................................................................................... 23
    Use of Ecological Studies in Research................................................................................................. 25
    Intrapersonal Factors............................................................................................................................... 27
    Interpersonal Factors............................................................................................................................... 30
    Environmental Factors........................................................................................................................... 33
    Sociocultural Factors.............................................................................................................................. 35

CHAPTER 3
METHOD......................................................................................................................................................... 39
  Introduction............................................................................................................................................... 39
  Research Design....................................................................................................................................... 39
  Participants............................................................................................................................................... 40
  Instruments............................................................................................................................................... 42
  Demographic Survey ............................................................................................................................... 42
  Interview Guide......................................................................................................................................... 42
    Demographic Survey............................................................................................................................. 42
    Interview Guide...................................................................................................................................... 42
  Data Collection Procedures..................................................................................................................... 43
    Participant Recruitment......................................................................................................................... 44
Limitations .......................................................................................................................... 107
Implications for Program Development ............................................................................ 109
Future Research .............................................................................................................. 111

APPENDICES ..................................................................................................................... 115
APPENDIX A: Demographic Survey .................................................................................. 116
APPENDIX B: Focus Group Interview Questions .............................................................. 118
APPENDIX C: Research Questions and Focus Group Interview Questions ...................... 121
APPENDIX D: Assent Form ............................................................................................... 123
APPENDIX E: Consent Form ............................................................................................ 126

REFERENCES .................................................................................................................... 129
LIST OF TABLES

Table 1. Participant Demographics

Table 2. Sport and Physical Activities of Participants

Table 3. Challenges and Barriers in Sport Participation

Table 4. Selective and Axial Codes: Challenges and Barriers in Sport Participation

Table 5. Strategies Utilized to Overcome Challenges and Barriers

Table 6. Selective and Axial Codes: Strategies Utilized to Overcome Challenges and Barriers

Table 7. Components of quality sports programs

Table 8. Selective and Axial Codes: Research Question 2

Table 9. Relationship between research questions, focus group questions, and theoretical framework
LIST OF FIGURES

Figure 1. Social ecological model for this study ................................................................. 8
Figure 2. Summary of findings supporting social ecological model – Challenges ............... 89
Figure 3. Summary of findings supporting social ecological model – Strategies............... 89
CHAPTER 1
INTRODUCTION

Statement of the Problem

Sport and physical activity have been shown to play a significant role in the development of adolescents. Regular physical activity contributes to achieving positive health outcomes. The benefits of physical activity include reduced risks of cardiovascular disease, type 2 diabetes and some cancers as well as weight management and improved mental health (Centers for Disease Control and Prevention[CDC], 2009; Sabo, Ward, & Oliveri, 2009). Also, regular physical activity is associated with positive psychological outcomes including increases in motivation, global self-esteem, perceived competence, and enjoyment (Weise-Bjornstal, 2007). However, despite the known benefits of regular participation in physical activity, many adolescents are not meeting recommended levels of daily physical activity (Butcher, Sallis, Mayer, & Woodruff, 2008).

In recent years, girls have experienced a decline in physical activity as they progress through their adolescent years with African American girls experiencing a decline in physical activity that is twice that of white adolescent girls (Felton et al., 2002; Kimm et al., 2002). Adolescents that are not physically active are likely to continue to be inactive as they become adults, particularly black females (Gordon-Larsen, Nelson, & Popkin, 2004). The latest Youth Risk Behavior Survey (YRBS) revealed that 26.7% of black females did not participate in at least 60 minutes of physical activity on any day as compared to 13.7% of white females (CDC, 2012). Among girls in grades 9-12, 19.6% of black females are overweight compared to 13.8% of white girls and 18.6% of black girls are obese as compared to 7.7% of white girls (CDC, 2012). Despite the known health benefits of
participation in physical activity, research indicates that gender and racial disparities continue to exist. In light of the declining levels of participation among African American adolescent girls, there is an increased need for programs and interventions that provide opportunities that encourage and motivate girls to be physically active (Grieser et al., 2006; Tucker Center, 2007).

There are at least two challenges related to the role of sport in providing a vehicle for engaging urban African American girls in sufficient physical activity to gain the physical benefits necessary for good health and to promote a healthier lifestyle. The first challenge is to get girls involved in sport and physical activity and the second challenge is to keep them involved. While these challenges exist for both boys and girls, females face a myriad of barriers to engaging in sport (Dwyer, et al., 2006; Vu, Murrie, Gonzalez, & Jobe, 2006; Whitehead & Biddle, 2008) and face unique challenges for sustaining involvement in sport. Again, researchers (Felton et al., 2002; Kimm et al., 2002) have reported a decline in sports and physical activity participation among girls entering high school with withdrawal numbers being particularly high for African American adolescent girls. In addition to health concerns, girls who do not engage in sport and/or physical activity are missing out on valuable life skills and assets needed to become productive adults.

Barriers that limit African American adolescent girls’ participation in sport and physical activity are influenced by intrapersonal (e.g., lack of motivation, lack of skill), interpersonal (e.g., lack of support from family and friends), environmental (e.g., unsafe neighborhoods), and sociocultural (e.g., lack of African American female athlete role models) factors. Vu et al. (2006) investigated the perceptions of girls’ physical activity behaviors and found that both boys and girls reported perceptions of barriers for girls to
be physically active. A common reported barrier for girls was the presence of boys. Girls often received negative feedback from boys that included being teased, thus discouraging them from participation (Vu et al., 2006). Additional barriers reported by participants included lack of motivation or interest, low self-esteem, fear of getting dirty or sweaty, and hanging out with family and friends as well as lack of transportation and the costs and fees for programs (Vu et al., 2006).

Similarly, Whitehead and Biddle (2008) found comparable responses in their investigation of adolescent girls’ physical activity perceptions. Many girls found it difficult to be active while maintaining a feminine image. Changing priorities was also a barrier as girls wanted to spend more time with their friends and participate in other activities (Whitehead & Biddle, 2008). The influence of peers’, parents’, and teachers’, concerns about safety, inaccessibility of facilities and the cost of using them, and lack of time were also identified as barriers to sport and physical activity by Dwyer and colleagues (Dwyer et al., 2006).

To address the decline in sport and physical activity among female adolescents, particularly African American girls in urban areas, it is important to understand how girls address barriers they may encounter in pursuing sport and physical activity as well as getting feedback on what program components would encourage more African American girls to participate in sport and physical activity programming. Interventions are needed to promote physical activity among this population (Neumark-Sztainer, Story, Hannan, Tharp, & Rex, 2003; Butcher et al., 2008).

Despite the positive role sport and physical activity can have on youth, girls of color in urban areas have not had the same opportunities and access to programs to be able to
experience these benefits (Sabo, Ward, & Oliveri, 2009). Girls also drop out at higher rates than boys without experiencing the benefits that sport and physical activity participation can provide (Sabo & Veliz, 2008). These findings demonstrate the need to understand what barriers may exist for girls that limit their sport and physical activity participation and what program offerings can help overcome these barriers. Professionals that work with adolescents need to have an understanding of the relationships among the personal, social, cultural, and environmental factors girls experience and use this knowledge in designing and implementing interventions that will best serve this population.

**Theoretical Framework**

Adolescents are influenced by their environment which includes family, friends, school, and community as well as social and cultural norms. In order to effectively engage African American girls in urban areas in sport and physical activity participation and to develop effective interventions and programs, it is important to understand the multiple factors that influence adolescent girls’ engagement in physical activity. This study will reveal which ecological barriers influence girls’ engagement in sport and physical activity and how they are able to overcome these barriers.

This study adopted a social ecological theoretical framework. This model was selected because it is a comprehensive developmental model that explains the complex relationships and influences that effect the participation of adolescent girls in sport and physical activity. Decisions to participate in sport and physical activity are influenced by their surrounding environments and settings. These influences can be intrapersonal, interpersonal, environmental, and sociocultural. The model was used to examine the
relationships between these contextual factors and their influence on the participation of girls in sport and physical activity.

Social ecological models are integrated models that consider the influence of multiple levels. This consideration of multiple levels of influence can guide the development of more comprehensive interventions by systematically targeting mechanisms of change at each level of influence (Sallis, Owen, & Fisher, 2008). Adolescents are highly influenced by their social environment so in order to get a broad perspective, it is important to focus not only on individual characteristics but also the social and environmental context of behavior as well, which will allow for developing effective programming. This framework can be used in an effort to better understand why some African American female adolescents are able to overcome barriers to sport and physical activity participation and what program components are important to keep girls engaged.

Bronfenbrenner’s Ecological Systems Theory (EST; Bronfenbrenner, 1979) is a well known social ecological model that is used to explain the relationship of an adolescent’s environment to her/his developmental and behavioral outcomes. Bronfenbrenner’s theory proposes that the ecological environment of individuals consists of four interrelated structures which are microsystem, mesosystem, exosystem, and macrosystem. Microsystems are the inner most level and are defined as “a pattern of activities, roles and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics” (Bronfenbrenner, 1979, p.22). Settings are immediate environments that include home and school in which an adolescent engages in face-to-face interactions with others. The adolescent experiences activities, roles, and
interpersonal relations which constitute the elements of the microsystem (Bronfenbrenner, 1979).

The next level of the environment is the mesosystem. The mesosystem “comprises the interrelations among two or more settings in which the developing person actively participates” (Bronfenbrenner, 1979, p.25). The mesosystem encompasses the relationships and interactions between two or more microsystems that contain the adolescent and interactions between these two microsystems (e.g., interactions between school and family). The third level is the exosystem which “refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect or are affected by, what happens in the setting containing the developing person” (Bronfenbrenner, 1979, p.25). Social structures such as the neighborhood or city in which an adolescent lives or programs in the community may not directly involve them but the resulting interactions influence their development. Unsafe neighborhoods or communities that do not offer many sport and physical activity programs can influence the participation decisions of young girls.

The last level of the environment is the macrosystem which "refers to consistencies in the micro-, meso-, and exosystems that exist or could exist within a cultural or subcultural context along with belief systems or ideologies underlying the consistencies” (Bronfenbrenner, 1979, p. 26). The influence of social and cultural norms of a society on the levels of participation in sport and physical activity among adolescent girls provides an example within the macrosystem. Many social ecological models have emerged from Bronfrenbrenner’s theory. This theory guided the social ecological model used in this study.
The social ecological model for this study focuses on multiple system levels (intrapersonal, interpersonal, environmental, sociocultural) that influence the participation in sport and physical activity among African American adolescent girls (see Figure 1). This model will allow a more comprehensive look at the barriers girls experience as well as the facilitators that have helped them overcome these barriers. Examining barriers from an ecological perspective will inform practitioners about the influence of the social environment girls experience at home, in school, and within the community and how these influences effect their perceptions regarding sport and physical activity. Additionally, intrapersonal, interpersonal, environmental, and sociocultural factors should be considered when designing interventions as they can help identify possible intervention strategies that will engage more African American adolescent girls.

Purpose

The goal of this study is to address the barriers experienced by African American adolescent girls who are engaged in sport in urban areas and how these girls who continue participation overcome the barriers. Additionally, this study will seek to better understand the components of quality sports and physical activity programming that will engage and encourage continued participation among this population.
**Research Questions**

The research problems addressed in this study are to identify the challenges and barriers adolescent girls experienced while participating in sport, to identify strategies utilized to overcome the challenges and barriers, and to identify program components that will engage and retain young girls. To address gaps in the literature, the following research questions are posed:

RQ1: What are the challenges and barriers girls faced while participating in sport?

RQ2: What strategies, techniques, and support systems did they utilize to overcome these challenges and barriers?

RQ3: What are the components of quality sports programs that engage girls and keep them participating in sport?
Significance

Findings from this study are of significance for several reasons. The current study supplements other qualitative research that investigates the experiences of adolescent girls in sport and physical activity by further examining how their perspectives have influenced their involvement in sport and physical activity despite barriers they may have encountered. It seeks to extend existing research by examining the experiences of urban African American girls from an ecological perspective. This study explores the barriers girls experience by considering not only personal factors but also the interactions of social and environmental factors that influence participation. The use of focus group discussions led to meaningful insights pertaining to girls’ physical activity involvement.

This study extends the literature and knowledge about the experiences of African American adolescent girls in urban areas, a population that is often ignored. Because this population has a higher prevalence of inactivity when compared to other adolescent girls, it is important to conduct research on this often overlooked population. An in-depth examination is provided about the girls’ thoughts and feelings regarding their sport and physical activity participation as well as their opinions on program components that will have the greatest impact on increasing and sustaining sport and physical activity levels among this population.

Interventions and quality programming are needed to encourage girls to participate in sport and physical activity to experience the benefits of regular physical activity and to establish healthy behaviors. This research allowed for the girls themselves to contribute feedback on the design of interventions and programming that will engage girls and help them overcome the barriers. This research has implications for practitioners and
researchers on the barriers girls encounter allowing them to make informed decisions about key program components they can incorporate into sport and physical activity programs, especially those involving African American adolescent females. The results of this study can be used to develop strategies that will assist youth workers in retaining girls in sport and physical activity and encouraging others to get involved.

In sum, this research is needed to gain a better understanding of how to increase the physical activity levels of African American girls in urban areas. While there has been some research in this area, it remains a significant issue shown by the continuing decline in physical activity levels among this population. Addressing this decline can be done by understanding specific barriers that may have hindered participation and how girls overcame them as well as gaining insight into the program components they believe must be included in sport and physical activity programming to get more girls engaged and embracing active lifestyles while significantly reducing health risks associated with inactivity.

**Summary**

The findings from this study not only provide researchers and practitioners with insights into the barriers that girls experience but also with strategies to overcome these barriers and their opinions about the program components that will be necessary to engage African American adolescent girls in sport and physical activity programming and encourage them to incorporate physical activity into their daily lives. This chapter identifies the description of the study including the statement of the problem, theoretical framework, purpose, research questions, and the significance for this study. In the next
chapter, relevant literature is reviewed to provide more detailed descriptions of the problem to be addressed.
CHAPTER 2
REVIEW OF LITERATURE

Introduction

With sport and physical activity playing a significant role in the development of youth, it is particularly urgent to get girls involved because girls experience a decline in physical activity during adolescence (Felton et al., 2002, Kimm et al., 2002) and are less active than boys (Sabo & Veliz, 2008). In the following section, girls’ participation in sport and physical activity, focusing on African American girls in urban areas, will be discussed. The theoretical framework utilized in this study will be presented followed by the barriers girls encounter to participation in sport and physical activity.

Girl’s Participation in Sport and Physical Activity

Support for participation in sport and physical activity among girls has increased in recent years. This is partly due to the passing of Title IX in 1972, federal legislation which prohibits sex discrimination in educational environments. This law led to an increase in women’s and girls’ participation in sport and physical activity. Participation in girl’s interscholastic sports increased from 294,015 in 1972 to 3,207,533 in 2012 (National Federation of State High School Associations [NFSHS], 2013). A total of about 200,000 females participated in intercollegiate sports in 2012 which is the highest in history (Acosta & Carpenter, 2012). The average number of women’s varsity intercollegiate teams per school prior to the passage of Title IX was 2.50 in 1970 and has increased to 8.73 in 2012 (Acosta & Carpenter, 2012). These numbers show that overall participation in sport and physical activity among girls has been on the rise over the past few decades.
In the Women’s Sports Foundation Report, “Her Life Depends on It II”, Staurowsky et al. (2009) reported on the benefits of regular physical activity and sport for girls and women. Regular physical activity lowers the risk for chronic diseases that include cardiovascular disease, obesity, osteoporosis, dementia, and certain cancers. Lower rates of drug use, cigarette use, risky sexual behavior, and teen pregnancy were reported among girls involved in sport. Sport participation has also shown positive effects on the mental health and well-being of girls in the form of lower levels of depression, positive body image, and higher levels of self-esteem (Staurowsky et al., 2009).

In examining the relationship between sport participation and overall participation in vigorous physical activity during late adolescence, Pfeiffer et al. (2006) found that girls that participated in sport were more likely to participate in vigorous physical activity over time when compared to girls that did not participate in sport. Girls that participated in sports in eighth and ninth grades were more likely to be vigorously active in 12th grade, which illustrates the benefits of getting girls involved during early adolescence. Sports involvement has been shown to enhance the quality of life for girls (Sabo & Veliz 2008).

However, despite findings that sport and physical activity participation can result in better physical and psychological health in the United States, there has been alarming levels of sedentary lifestyles and rising obesity rates among youth. A major reason for this startling rise in overweight and obesity rates is the level of inactivity among youth. The 2008 Physical Activity Guidelines for Americans (CDC, 2008) stated that adolescents should be getting at least 60 minutes of physical activity every day with at least 3 days per week including vigorous intensity activity. However, according to the Centers for Disease Control and Prevention (CDC, 2012), 13.8% of high school students did not participate in at
least 60 minutes of physical activity on any day (CDC, 2012). In 2009 – 2010, 35.7% of U.S. adults were obese and almost 17% of children and adolescents were obese during the same time period which equates to about 12.5 million youth (Ogden, Carroll, Kit, & Flegal, 2012). It was reported that 13% of 9th -12th grade students are obese while 15.2% are overweight (CDC, 2012). This growing trend of declining rates of physical activity and increasing rates of obesity among adolescents are indications that community programs need to be designed to reverse these trends. Obesity and physical inactivity has been seen as a major epidemic, particularly among adolescents, but there continues to be a dramatic decline in physical activity levels among female adolescents. While many adolescents do not meet the recommended levels of physical activity, the percentages of inactivity are higher among females than males. Data from the most recent Youth Risk Behavior Surveillance (YBRS) indicated that 17.7% of adolescent girls in grades 9-12 did not participate in at least 60 minutes of physical activity on any day as compared to 10% of males (CDC, 2012). The prevalence of obesity was higher among girls ages 12 – 17 (17.1%) than girls ages 6-11 (Ogden et al., 2012).

Recent trends show that participation rates of girls across all types of physical activity (e.g., organized sports, outdoor recreation, youth clubs, and physical education classes), has decreased (Tucker Center, 2007). Trends also show a decline in moderate- to –vigorous physical activity participation among girls and girl’s participation rates in sport and physical activity fall behind the rates of boy’s participation (Tucker Center, 2007). In a five year longitudinal study, Nelson, Neumark-Sztainer, Hannan, Sirard, and Story (2006) investigated trends in physical activity and sedentary behavior and found a dramatic decline in moderate to vigorous physical activity among girls from early adolescence (mean
age 12.8) to late adolescence (mean age 15.8) as well as a significant increase in computer use among older girls. Pate, Dowda, O’Neill, and Ward (2007) reported that vigorous physical activity declined among adolescent girls from the 8th grade to the 12th grade and noted the importance of participating in sport and physical activity during early adolescence as it can lead to continued participation into late adolescence in girls. Despite the growth in sport participation among girls and women in the 40 years since the passage of Title IX, there has been a decline in physical activity among adolescent girls, particularly African American adolescent girls, which is a great cause of concern and indicates a need to gain a better understanding of girls’ participation trends and determine what can be done to address them.

**African American Girls in Urban Areas**

The decline in sport and physical activity participation among adolescent girls has been more evident among African American females. Reports reveal that 26.7% of black females did not participate in at least 60 minutes of physical activity on any day as compared to 13.7% of white females (CDC, 2012). Among girls in grades 9-12, 19.6% of black females are overweight compared to 13.8% of white girls and 18.6% of black girls are obese as compared to 7.7% of white girls (CDC, 2012). Kimm et al. (2002) conducted a longitudinal study that followed adolescent girls from ages 9–10 to ages 18–19 and found sharp declines in physical activity levels during adolescence. It was reported that black girls had a decline in physical activity twice that of white girls. Felton et al. (2002) found that Black girls had significantly lower levels of physical activity, higher BMI values, and higher levels of watching television compared to white girls.
Sabo and Veliz (2008) conducted a nationwide study measuring the participation rates of girls and boys in exercise and organized team sports. While youth sports are racially and ethnically diverse, inequities continue to exist, especially affecting girls of color. Only 59% of third- to fifth-grade girls in urban communities were involved with sport compared to 80% of boys in urban communities. In suburban communities, 81% of girls in third through fifth grades were involved in sport and 73% of girls in rural communities were involved in sport (Sabo & Veliz, 2008). In looking at racial participation of children in sport, Sabo and Veliz (2008) found that African Americans comprised 15% of all female athletes compared to 60% of Caucasian female athletes.

In identifying why sports and physical activity programs are important for girls from urban communities, Sabo and colleagues (2009) noted that this population does not have as many opportunities to participate in sport and physical activity programs as boys do or girls that live in other communities. This is a concern because sport and physical activity programs can result in educational gains, a variety of health benefits, can be an asset to families and help girls to overcome personal and social barriers (Sabo et al., 2009). Despite the known health benefits of participation in physical activity, research indicates that gender and racial disparities continue to exist. In light of the declining levels of participation among African American adolescent girls, there is an increased need for programs and interventions that provide opportunities that encourage and motivate girls to be physically active.

**Barriers to Sport and Physical Activity for Adolescent Girls**

Previous research has examined barriers adolescent girls experience that influence their decisions to participate in sport and physical activity. Dwyer et al. (2006) explored
perceived barriers to participation in physical activity among adolescent girls. Seventy-three adolescent girls in grades 10 and 11 participated in focus groups to share their experiences participating in physical activity. Specifically, girls were asked their reasons for participation, barriers that kept them from participating as well as suggestions to help them become more physically active. Participants cited lack of time as a major barrier to participation due to obligations such as homework, a part-time job, and responsibilities at home. Additional barriers included involvement in technology-related activities, influence of peers, parents, and teachers, and inaccessibility and cost of programs and/or facilities (Dwyer et al., 2006). In a qualitative study that investigated the perceptions, beliefs, and experiences of adolescent African American and Latino girls regarding physical activity, it was found that girls were discouraged during physical education classes partly due to the presence of boys that excluded them during activities (Taylor et al., 1999). Girls in this study also reported concerns about their hair and makeup while participating in sport and physical activity as well as a fear of sweating as well as concerns regarding the limited opportunities and accessibility to participate in sport and physical activity.

Yungblut, Schinke, & McGannon (2012) also examined the experiences of adolescent girls in sport and physical activity. Two cohorts of girls ages 12 -14 and ages 15 -18 participated in this study that identified five areas that influence their participation in physical activity: (a) friends or don't know anyone; (b) good or not good enough; (c) fun or not fun; (d) good feeling or gross; and (e) peer support or peer pressure. According to these findings, barriers to participation included not having friends that also participate, not being skilled enough to participate, not having fun, not feeling good about participating (feeling sweaty, tired and gross afterwards) and being judged by peers.
Similarly, girls in grades 6-8 from low socioeconomic areas participated in a study that sought to gain an understanding of girls’ perceived barriers to physical activity (Robbins, Pender, & Kazanis, 2003). Seventy-seven girls participated in this quantitative study and identified the following top barriers to their physical activity participation: “I am self-conscious about my looks when I exercise”, “I am not motivated to be active”, “I am too busy”, “I don’t feel like exercising when I have a bad or tiring day at school”, and “The weather is too bad”. The top barriers identified by African American participants were “I am self-conscious about my looks when I exercise”, and “I am not motivated to be active”.

Conducting focus groups with adolescent girls, Slater and Tiggemann (2010) sought to identify reasons girls withdraw from sport and physical activity participation. Girls ages 13-15 identified several reasons girls stop playing sport and physical activity including a loss of interest in the activity, more time to participate in other social activities, lack of competence in their physical skills, limited availability and accessibility of activities, negative family and friend influences, and practical issues that include transportation and financial issues. When girls were asked why they do not participate in sport as much as boys do, they responded that it is not ‘cool’ or feminine for girls to play sport, school work, and other social activities were more important, limited sporting options for girls, and concerns about uniforms and body image.

Many girls understand the benefits of physical activity participation, yet many still identify barriers to their participation. For instance, Grieser et al. (2006) studied physical activity attitudes, preferences, and practices among adolescent girls. A majority of participants cited staying in shape as the predominant benefit of participation in physical activity, associating staying in shape with a healthy, strong, and attractive body. Additional
benefits of physical activity participation included playing sports, running around being active, and social contact with the team. However, perceived negative aspects of physical activity included possible injury, sweating, being tired and out of breath as well as not liking certain sports and physical activities. Similarly, Allender, Cowburn, and Foster (2006) conducted a systematic review of qualitative studies and compiled reasons for and barriers to participation in sport and physical activity among youth and adults. Reasons for participation included weight management, concerns regarding body image and social support yet reported barriers among girls included concerns about remaining feminine and attractive while being active, low levels of perceived competence, tight uniforms, and negative influences from boys, particularly in physical education classes.

There are a number of similarities across the mentioned studies indicating a multitude of barriers that girls encounter and a need to investigate the sources of these low levels of sport and physical activity participation among African American adolescent girls. Low levels of sport and physical activity among African American girls in urban areas are a result of numerous factors that include limited opportunities, perceptions of femininity, lack of support from family and friends, and low perceived competence. Based on the low rates of participation in sport and physical activity among this population, it is essential to further examine the barriers girls experience. While many studies focus on intrapersonal barriers, it is important to also consider the influence of social networks, the surrounding physical environment as well as social and cultural norms in this analysis and the use of a social ecological perspective allows that. Because the influences on a girl’s decision to participate in sport and physical activity are so complex, it is advantageous to understand the intrapersonal, interpersonal, environmental, and sociocultural factors that influence
these decisions. This will be done in this study by adopting a social ecological theoretical framework.

**Theoretical Framework**

**Social Ecological Models.** Social ecological models provide a comprehensive approach to looking at how physical activity behaviors are influenced by multiple sources. In providing a broad perspective, social ecological models acknowledge that there are multiple levels of influence including individual characteristics but do not ignore the environmental and social context of physical activity behavior. Social ecological models consider not only an individual’s personal beliefs, attitudes, and behaviors but also address the influences of their immediate circle (peers and family members), the surrounding physical environment, and social/cultural norms. Applying a socio-ecological framework to this study allowed for a better understanding of the barriers African American adolescent girls, particularly in urban areas, face in order to develop comprehensive sport and physical activity programs that will increase regular participation in sport and physical activity addressing disparities in the physical and psychological outcomes due to decreased levels of physical activity.

**Bronfenbrenner’s Ecological Systems Theory.** In order to effectively engage African American urban girls in sport and physical activity participation and to develop effective interventions and programs, it is important to understand the multiple factors that influence adolescent girls’ engagement in physical activity. This study is informed by Bronfenbrenner’s Ecological Systems Theory (Bronfenbrenner, 1979) which is a well-known social ecological model that explains the relationship of an adolescent’s environment to her/his developmental and behavioral outcomes. Bronfenbrenner’s theory
proposes that human behavior is complex and complex relationships exist among intrapersonal, interpersonal, environmental, and socio-cultural influences on an individual’s behavior. A social ecological theoretical framework will be adopted for this study to explain the complex relationships and influences that effect the participation of African American adolescent girls in sport and physical activity.

Bronfenbrenner’s (1979) theory highlights the complexity of the multiple factors that influence the physical activity behavior of an individual. Bronfenbrenner's theory proposes that the ecological environment of individuals consists of four interrelated structures which are microsystem, mesosystem, exosystem, and macrosystem. The personal and psychological characteristics of an individual are at the center of the model. Microsystems are the inner most environmental level and are defined as “a pattern of activities, roles and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics” (Bronfenbrenner, 1979, p.22). Environments within microsystems are where adolescents engage in face-to-face interactions with others. These settings can include home, school, community centers, and playgrounds. The next level of the environment is the mesosystem, which “comprises the interrelations among two or more settings in which the developing person actively participates” (Bronfenbrenner, 1979, p.25). The mesosystem is described as the relationships and interactions that occur between two or more microsystems and can include peer relationships and interactions between family and coaches.

The third level of influence is the exosystem which “refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect or are affected by, what happens in the setting containing the developing
person” (Bronfenbrenner, 1979, p.25). Settings within the exosystem may not directly involve an individual but they are affected by the resulting interactions. Unsafe neighborhoods or communities that do not offer many sport and physical activity programs can influence the participation decisions of young girls.

The final level is the macrosystem which “refers to consistencies in the micro-, meso-, and exosystems that exist or could exist within a cultural or subcultural context along with belief systems or ideologies underlying the consistencies” (Bronfenbrenner, 1979, p. 26). The macrosystem includes influences like culture, religion, social norms, and government policies. An example within the macrosystem is the role gender stereotyping in sport and physical activity has on the participation of adolescent girls.

**Social Ecological Model Variations.** There are variations of the social ecological model that have emerged that are rooted in the facets of Bronfenbrenner’s theory, focusing on the relationship between individuals and their environment, particularly for application to health and physical activity behaviors (e.g., McLeroy, Bibeau, Steckler, & Glanz, 1988; Sallis et al., 2008; Spence & Lee, 2003; Stokols, 1992). The ecological framework of McLeroy and colleagues (McLeroy et al., 1988), was designed for health promotion and include the following factors: intrapersonal factors (characteristics of the individual), interpersonal processes and primary groups (social networks and social support systems), institutional factors (social institutions with organizational characteristics), community factors (relationships among organizations, institutions, and informal networks), and public policy (local, state, and national laws and policies). In proposing an ecological model for physical activity (EMPA) promotion, Spence and Lee (2002) identified physical activity behavior as being influenced by interactions between environmental settings
(macrosystem, exosystem, mesosystem, and microsystem dimensions) and biological and psychological factors. While there are many variations of social ecological models, they all share common features focusing on the relationship between individuals and their environment. Bronfenbrenner's theory has served as a guide for subsequent models with the general purpose of acknowledging that there are multiple levels of influence on human behavior, including physical activity behavior.

**Framework for this Study.** In keeping with the intent of social ecological models integrating multiple levels of influence on physical activity behavior, the framework for this study to examine the sport and physical activity behaviors of African American adolescent girls utilized four levels of influence: intrapersonal, interpersonal, environmental and sociocultural. Based on previous social ecological models, these levels of influence have been shown to be important factors influencing physical activity behavior (McLeroy et al., 1988; Sallis et al., 2008; Spence & Lee 2003). The experiences and perceptions African American girls hold regarding sport and physical activity play a role in their decisions to regularly participate. These decisions to participate in sport and physical activity are influenced by their surrounding environments and settings. Decreased levels of sport and physical activity participation among African American adolescent girls in urban areas can be explained by intrapersonal (e.g., lack of motivation, lack of skill), interpersonal (e.g., lack of support from family and friends), environmental (e.g. unsafe neighborhoods), and sociocultural (e.g., lack of African American female athlete role models) factors that serve as barriers to sport and physical activity.

The use of a social ecological theoretical framework in this study will help to explain complex relationships and influences that effect the participation of African American girls.
Adolescents are highly influenced by their social environment so in order to get a broad perspective, it is important to focus not only on individual characteristics but also the social and environmental context of behavior as well, which will allow for developing effective programming to encourage more African American girls to participate in sport and physical activity. This framework was used to better understand why some African American female adolescents are able to overcome barriers to sport and physical activity participation and what program components are important to keep girls engaged.

Intrapersonal factors are the first level of the model and include personal and psychological factors like attitudes, beliefs, and behaviors that are unique to each individual. Important psychological intrapersonal factors that influence girls’ participation in sport and physical activity include self-esteem, perceived competence, and enjoyment. Interpersonal factors are the second level and shape the behavior of adolescents through significant others such as the influences of peers and family members, teachers, and coaches through social support and role modeling. Environmental factors are influences of the community and physical environment that impact participation and include schools, neighborhoods, and community/recreation centers. Environmental factors that influence participation include neighborhood safety and accessibility to facilities and programs. Socio-cultural factors are macro-level factors that include cultural and social norms that may be direct or indirect influences. Intrapersonal, interpersonal, environmental and socio-cultural factors influence the participation in sport and physical activity among African American adolescent girls in urban areas therefore using a social ecological model in this study allowed for the exploration of the integration of these factors to identify
components that would be necessary to facilitate sport and physical activity participation among this population.

**Use of Ecological Studies in Research.** Social ecological models have been used in several studies to examine physical activity participation (Fleury & Lee, 2006; Langille & Rodgers, 2010; Stanley, Boshoff, & Dollman, 2012; Thul & LaVoi, 2011; Zhang, Solomon, Gao, & Kosma, 2012). These researchers have explored how different factors have influenced physical activity participation.

Fleury and Lee (2006) used a social ecological approach to gain an understanding of intrapersonal, interpersonal, community and environment, and organizational factors influencing physical activity among African American women. Perceived functional ability, socioeconomic status, educational level, employment status, and motivational variables including knowledge and behaviors were identified as intrapersonal resources while interpersonal resources included the support of family and friends and social norms. Langille and Rodgers (2010) also utilized a social ecological model to explore the promotion of school-based physical activity. Focusing on broader levels of influence, 14 stakeholders with roles in school physical activity promotion at the community, organizational, and policy levels participated in interviews offering their perspectives on school-based physical activity promotion at each level of the social ecological model. The influence of policy was found to have a strong influence on the community and organizational levels of the social ecological model particularly influencing school environments and the opportunities available for children to engage in physical activity. This finding, which demonstrates the “trickle-down” influence factors at the policy level
A social ecological approach has also been utilized to examine physical activity behaviors specifically among youth. Stanley, Boshoff, and Dollman (2012) sought the perceptions of children regarding factors that influence their involvement in physical activity during recess using a social ecological model. Participants mentioned several barriers and facilitators that fell into the categories of intrapersonal, physical environment, and social characteristics. Perceived barriers included lack of access to space, programs, and proper equipment (physical environment), perceived competence and lack of motivation (intrapersonal), and bullying/teasing and negative peer and teacher influences (social environment). Perceived facilitators included adequate space, available equipment (physical environment), enjoyment, beliefs and feelings about physical activity (intrapersonal), opportunities to socialize with friends, and supportive teachers (social environment). Similarly, a social ecological perspective was utilized to examine the relationships among individual, social environmental, physical environmental, and physical activity behaviors among middle school students and how these variables influence physical activity participation (Zhang et al., 2012). Participants were 285 middle school students enrolled in physical education classes that completed a survey that assessed individual, social environmental, and physical environmental factors as well as their levels of physical activity. They found that social environmental (i.e., social support from friends, parents, and teachers) and physical environmental variables (i.e., equipment accessibility and neighborhood safety) positively contributed to physical activity participation among this population. Additionally, self-efficacy was a strong predictor of physical activity.
participation suggesting students with higher self-efficacy were more likely to engage in regular physical activity.

Lastly, Thul and LaVoi (2011) used semi-structured interviews and focus groups to identify barriers to and facilitators of physical activity participation among East African girls aged 12-18. A number of barriers were identified including personal (lack of time, feelings of incompetence, lack of interest), social (gender stereotypes, lack of support from parents and peers), and environmental (limited private community space, and limited physical activity opportunities) barriers. As shown, applying a social ecological perspective to the examination of physical activity behaviors emphasizes the interplay that exists between systems (e.g., intrapersonal, interpersonal, environmental, and sociocultural). This study sought to use this framework to provide a comprehensive examination of the barriers experienced by African American adolescent girls as well as investigate the strategies and support systems they have identified as a mode of navigating said barriers.

**Intrapersonal factors.** Several intrapersonal factors have been associated with an increase in sport and physical activity participation among adolescent girls. Biddle and colleagues (Biddle, Whitehead, O'Donovan & Nevill, 2005) conducted a review of literature on the correlates of participation in physical activity for adolescent girls. Among psychological variables, it was found that perceived competence, higher self-efficacy and enjoyment were positively associated with physical activity participation. It was also reported that physical activity was associated with positive physical perceptions of one’s body attractiveness. These findings suggested that physical activity programs for girls should allow for the development of perceptions of competence and confidence (Biddle et al., 2005).
Perceived self-efficacy can have an effect on sport and physical activity participation. If girls have low levels of self-efficacy, they will be reluctant to participate in sport and physical activity because they will perceive that they will not perform well enough to succeed. Self-efficacy has been shown to be consistently related to increased physical activity (Dishman et al., 2005). Higher physical activity self-efficacy is significantly associated with structured physical activity (Barr-Anderson et al., 2007; Barr-Anderson et al., 2008)) supporting the need for girls to participate in high quality, structured sport and physical activity programming.

Physical activity programs have shown increases in levels of self-perceptions in adolescent girls. Annesi, Westcott, Faigenbaum, and Unruh (2005) examined the outcomes of a 12-week after school physical activity program for 5 to 12 year old youth and reported reductions in body fat, increases in strength, as well as improvements in self-efficacy scores among the 9 – 12 year old girls. Similarly, Colchico, Zybert, and Basch (2000) assessed a 12-week physical activity program for urban minority adolescent girls and found improvements in physical fitness (i.e., cardiovascular endurance, muscular strength, muscular endurance, and flexibility) and self-perceptions (i.e., subscales including scholastic competence, social acceptance, athletic competence, physical appearance, and global self-worth). Girls developed competence in their skills over the course of the program which demonstrates the importance of girls perceiving competence in their skills as it can lead to continued participation in sport and physical activity. Perceived physical competence has been found to be positively associated with adolescent physical activity participation (Bois, Sarrazin, Brustad, Trouilloud, & Cury, 2005; Sallis, Prochaska & Taylor, 2000). Boys have higher perceived competence in sport than girls do (Fredricks & Eccles,
2005, Raudsepp, Liblik, & Hannus, 2002) but sport competence and strength competence have been shown to be moderately associated with moderate to vigorous physical activity and physical fitness in adolescent girls (Raudsepp et al., 2002).

Additionally, enjoyment is an intrapersonal factor that has been identified as a factor influencing the decisions of girls to participate in sport and physical activity. Increased enjoyment has been shown to result in increased physical activity among adolescent girls (Dishman et al., 2005). Enjoyment was the main reason active girls participated in sport and physical activity and believed if they did not enjoy an activity, they would not participate (Whitehead & Biddle, 2008). Unfortunately, Black girls report lower levels of physical activity enjoyment as compared to white girls (Grieser et al., 2008) so it is important to know what makes sport and physical activity programs enjoyable in order to influence adolescent girls to participate. Programs that are aimed at increasing sport and physical activity participation of African American adolescent girls should include activities that ensure girls’ enjoyment as well as increases perceived competence and self-efficacy as they are significant predictors of further involvement in sport and physical activity.

Positive body image and self-esteem are also intrapersonal factors that can influence sport and physical activity participation. Involvement in team sports during early adolescence was found to predict increases in self-esteem during middle adolescence in urban adolescent girls, which is important because this is the time girls often drop out of sport (Pederson & Seidman, 2004). Additionally, girls that are physically active are likely to have more positive perceptions of their body’s attractiveness and overall physical self-worth (Biddle et al., 2005). Girls that have body image concerns often experience
decreased levels in sport and physical activity participation (Slater & Tiggemann, 2011). Therefore, it is important to design programs that incorporate components that address concerns girls may have that affect their self-esteem and perceptions about their bodies. Self-perceptions were found most strongly associated with physical activity suggesting programs seeking to increase physical activity among adolescent girls should “help adolescent girls feel better about themselves in general and more specifically about their physical activity skill” (Neumark-Sztainer et al., 2003, pg. 809).

**Interpersonal Factors.** Researchers have also examined interpersonal factors that influence girls’ participation in sport and physical activity. Parents, siblings, peers, and teachers have been shown to influence sport and physical activity participation among girls. Neumark-Sztainer et al. (2003) conducted a longitudinal study investigating the factors associated with change in physical activity among inactive adolescent girls and found one of the strongest and most consistent factors to be support from parents, peers, and teachers. Sibling physical activity has also been found to be consistently related to adolescent physical activity (Sallis et al., 2000).

Bruening, Borland, and Burton (2008) conducted a qualitative study with fourteen African American female student-athletes to determine the impact of influential others on their sport participation. Family members, coaches, peers, the community, and the church were found to be influential in the sport development of participants with immediate family members being the most influential in encouraging their involvement in sport as well as the selection of the sport they decided to participate in. Additionally, it was noted that while family members and coaches influenced girls to participate, their friends and teammates kept them involved with sport serving as a social outlet (Bruening et al., 2008).
The support of parents can be very important in encouraging or hindering the participation in sport and physical activity of adolescent girls because parents are often providers of the experience through the paying of fees, providing transportation to activities, offering encouragement, and sometimes serving as an active role model for their daughters. In many cases, if both parents are working, they may not have the availability to provide the time to invest in their daughter’s participation in sport and physical activity.

African American adolescents reported support and encouragement from parents to be influential in their physical activity participation decisions (Davison, Cutting, & Birch, 2003; McGuire, Hannan, Neumark-Sztainer, Cossrow, & Story, 2002; Ries, Voorhees, Gittelsohn, Roche, & Astone, 2008). Active girls received more parental encouragement than girls that were less active and the parents of active girls were involved with their daughters in physical activity from a young age (Whitehead & Biddle, 2008).

The role parents play in their daughter’s sport and physical activity participation can also impact their future sport involvement as adults (Dixon, Warner, & Bruening, 2008). Researchers interviewed NCAA female head coaches about the role of their parents in their sport involvement and reported that their continued involvement in sport resulted from their parents involvement in sport and physical activity (role models), their parents support of their athletic endeavors including attending games, providing transportation, and paying participation fees (Dixon et al., 2008). Coaches were also more likely to participate in sport if their parents believed sport participation was acceptable for females and if they were supportive and provided encouragement without pressure (Dixon et al., 2008). The importance of role modeling was shown to be important by Bois et al. (2005) through their findings that revealed that a mother’s involvement in physical activity was
related to their child’s involvement in physical activity. It was also found that mothers’
perceptions of their child’s competence predicted their child’s perceived physical
competence.

Adolescent girls have reported that parental expectations can also negatively
influence their participation levels (Dwyer et al., 2006). Some parents preferred girls to
focus on academics while others discouraged them from participation due to perceived
gender roles. These gender-stereotyped beliefs and behaviors can serve as a barrier to
girls participating in sport and physical activity (Fredericks & Eccles, 2005). Unfortunately,
there are parents that provide more opportunities and encouragement for their sons’
participation than their daughters (Fredericks & Eccles, 2005).

Support from friends has been associated with more physical activity among youth
(Duncan, Duncan, & Stryker, 2005). Many adolescent girls do not want to participate in
physical activity if their friends do not participate as well (Dwyer et al., 2006).

A number of research studies have investigated the role of peer influences on
physical activity behaviors. In examining social support among adolescent girls, Springer,
Kelder, and Hoelscher (2006) found that peer relationships were positively associated with
increased vigorous physical activity and that family relationships were positively
associated with decreased sedentary behaviors. Beets, Pitetti, and Forlaw (2007) found
that the social support of peers directly influenced activity levels and was related to
increased self-efficacy for overcoming barriers to physical activity among adolescent girls.
In examining the association between activity levels and the presence of peers, Salvy,
Bowker, & Roemmich (2008) found that youth showed high activity intensity when they
participated with peers and friends, especially overweight youth. Consistent with this
finding, Salvy et al. (2009) found that the presence of peers and friends increased youth’s motivation to be physically active and their actual activity levels.

It is important to note the influence males have on females that participate in sport and physical activity. Dwyer et al. (2006) found girls to be influenced by their friends and boyfriends, being pressured to spend more time with them as opposed to participating in sport and physical activity. Girls sport and physical activity participation can also be negatively influenced by being taunted and teased by boys, particularly during physical activity classes (Vu et al., 2006). Girls are more likely to experience teasing from their peers while participating in sport and physical activity than boys (Slater & Tiggemann, 2011), which can deter girls from participation or cause them to drop out. The questions remain as to how some girls are able to persist in sport in light of these negative influences.

**Environmental Factors.** Several physical environmental barriers were noted in the literature as well. The lack of available facilities in certain neighborhoods and transportation were identified as barriers to participation (Dwyer et al., 2006) as well as neighborhood safety, cost, and access to parks (Kipke et al, 2007; Lumeng, Appugliese, Cabral, Bradley, & Zuckerman, 2006; Ries et al., 2008, Romero et al., 2001; Romero, 2005). Girls have reported parental concerns about the safety of participating in physical activity after school due to the possibility of sexual assault or kidnapping as well as unsafe facilities (Dwyer et al., 2006).

African American girls in urban areas face additional barriers that are unique to their surroundings. Children in urban areas reported higher levels of neighborhood hazards including lack of access to parks, gangs, drugs, and crime (Romero et al., 2001). Urban communities can contribute to the high levels of obesity due to limited access to
parks and limited healthy food options (Kipke et al., 2007). With finances being a major factor in determining which sports girls will participate in, sport choice and initial exposure may be limited to certain sports (e.g., basketball and track) that cost less (Bruening et al., 2008). Additionally, sport choices in urban areas are limited, which limits the opportunities African American girls have to engage in physical activity. According to Bruening et al. (2008, pg. 406), “The disparity in sport choices between the suburbs and the inner cities references the role geography can play as a primary influencer regarding the indoctrination into sport and sport selection.”

Perceived neighborhood safety (e.g., safe for walking, bicycling, or jogging) and equipment accessibility are environmental variables that might influence the levels of physical activity among adolescent girls (Motl et al., 2005). High levels of crime are associated with decreases in physical activity (Gordon-Larsen, McMurray, & Popkin, 2000), which is a cause for concern because many urban areas have higher rates of crime.

Ries et al. (2008) examined the perceptions of urban African American adolescents of environmental factors that impact their levels of physical activity and found that a majority of youth perceived their environment offered more negative than positive influences on their physical activity involvement. Girls in the study noted negative social influences and negative environmental influences related to safety (crime, violence, drug dealers, and sexual offenders) as important influences to their physical activity involvement. Similarly, Felton et al. (2002) examined the differences in environmental factors associated with physical activity between black and white girls living in rural and urban areas and found that White girls reported greater access to sports equipment than Black girls and perceived the neighborhoods they lived in to be safe to be physically active.
Adolescent girls that live near parks with amenities like playgrounds, basketball courts, walking paths, swimming areas, and tracks have been shown to have higher rates of physical activity compared with girls with limited accessibility (Cohen et al., 2006). In investigating environmental determinants of physical activity among adolescents, Gordon-Larsen, McMurray, and Popkin (2000) found that school physical education, neighborhood community recreation centers, and serious crime were correlates of physical activity.

Participation in school physical education programs is associated with engaging in physical activity (Gordon-Larsen et al., 2000); however, with school physical education regularly being eliminated in schools, particularly in urban areas, adolescent girls may be missing out on the only opportunity they have to participate in regular physical activity.

Community recreation centers also serve as opportunities for girls to participate in regular sport and physical activity. Youth that use community recreation centers reported higher levels of physical activity than non users (Gordon-Larsen et al., 2000) but access to community recreation centers are often limited in urban areas. Sport and physical activity programs for girls need to be designed to increase their accessibility so that girls will be encouraged to participate.

**Sociocultural Factors.** Societal and cultural factors are also major influences on the sport and physical activity participation of girls as well. Socially constructed gender stereotyping has led to sports being identified as masculine and feminine (Alley & Hicks, 2005; Klomsten, Marsh, & Skaalvik, 2005). Adolescents have traditional views about activities that are deemed feminine and masculine. Masculine activities are associated with strength, aggression, and high levels of contact and include sports like football, ice hockey, and wrestling while sports traditionally perceived as feminine are more aesthetic and
include sports such as ballet, dance, and figure skating. (Klomsten et al., 2005).

Respondents believed boys to be tougher and more aggressive than girls whereas girls were seen as more graceful and caring. While boys participate in sport and physical activity at higher rates than girls, girls are more likely to participate in activities like dance, cheerleading, and aerobics that are not acknowledged as sport (Klomsten et al., 2005) and they are more likely to conform to gender stereotyping in activity selection. Alley and Hinks (2005) reported that gender-based stereotypes can influence sports participation which can lead to girls making decisions not to participate in sport and physical activity due to the possibility that they will be viewed as less feminine, particularly if they are considering a sport that is considered a traditionally masculine sport.

Views within African American culture that portray socially tolerant attitudes regarding women being overweight and obese can influence the views of African American adolescent girls that being overweight or obese is acceptable (Abrams & Stormer, 2002; Alleyne & LaPoint, 2004), which can influence their physical activity participation. If girls that are overweight or obese believe that they have the ideal body size as defined by their culture, they may not see a need to participate in sport and physical activity programs.

African American adolescent girls have unique body image views. Hesse-Biber, Howling, Leavy, and Lovejoy (2004) conducted a qualitative study with 78 African American adolescent girls who were asked questions regarding their experiences with body image and discovered that African American girls are not as dissatisfied with their bodies in the same manner as white girls. Girls identified being thick – “curvaceous with large hips, a rounded backside, and ample thighs” - as the most desirable body shape (Hesse-Biber et al., 2004, pg. 55). This study concluded that African American female’s
positive body image is linked to their positive sense of racial identity; however, this positive sense of Black identity can serve as a deterrent to sport and physical activity among African American girls. With many of the girls noting that larger sizes were more acceptable in the black community/culture, they may not see a need to participate in sport and physical activity, particularly for the purposes of getting in shape or losing weight. Socially tolerant attitudes toward overweight and obesity may influence African American adolescent girls to accept being overweight and obese themselves (Alleyne & LaPoint, 2004).

Many of the African American girls in the Hesse-Biber et al. (2004) study were not overly concerned with body image but showed some concern regarding their hair. Hair exemplifies the beauty struggles faced by African American women (Hesse-Biber et al., 2004). In this study, girls expressed the need to always have their hair done with one participant being concerned about getting made fun of if it is not done. Previous research has reported that adolescent girls have expressed concerns about the effect sport and physical activity participation has on their hair (Grieser et al., 2006; Taylor et al., 1999). With the hairstyles of African American girls being associated with their racial identity, they are not likely to risk messing up their hair to participate in sport and physical activity. It is important to consider these cultural factors when developing programs that will satisfy the needs of African American adolescent girls and to encourage them to be physically active. In addition, it would be informative to understand how high school athletes coped with this challenge and remained in sport.

The above mentioned studies addressed the variety of influences to participation in sport and physical activity among African American adolescent girls. These influences can
be located within intrapersonal, interpersonal, environmental, and sociocultural systems but further exploration is needed to address barriers that have been identified and recognize the strategies and support systems active girls employ to continue their participation. The current study will contribute to this knowledge from the perspective of African American girls and will include their strategies to overcome these barriers. This study sought not only to identify the challenges and barriers adolescent girls experienced while participating in sport and the strategies utilized to overcome the challenges and barriers, but also identify program components that will engage and retain young girls.
CHAPTER 3

METHOD

Introduction

The primary goal of this study was to address the barriers African American adolescent girls experience in participating in sports and physical activity programs and to identify strategies used by girls who have overcome the barriers. Additionally, this study sought to better understand the components of quality sports and physical activity programming that will engage and encourage continued participation among this population. This chapter includes a description of the research design, participants, instruments, data collection procedures, and data analysis procedures.

Research Design

Qualitative methodology in the form of focus group interviews were used for this descriptive study. Focus groups were used to gather qualitative data to explore barriers girls who participate in sports and physical activity programs may have faced and how they overcame these barriers to continue participation. Interviews also explored the components of quality sports and physical activity programs. This methodology allowed the primary researcher to collect rich descriptive data (Morgan & Krueger, 1998), providing a deeper understanding of the topic being explored and allowing girls the opportunity to describe their experiences in their own words. The use of focus group methodology over individual interviews resulted in the researcher being able to probe this topic with more than one participant at a time (Litosseliti, 2003). Additional advantages of using a focus group methodology included providing a comfortable environment for participants, it was time and cost efficient compared to individual interviews, and it
promoted spontaneity (Litosseliti, 2003). Previous studies have used focus groups with adolescent girls to investigate the barriers and facilitators to sport and physical activity girls have experienced (Dwyer et al., 2006; Slater & Tiggemann, 2010; Taylor et al., 1999; Thul & LaVoi, 2011; Whitehead & Biddle, 2008). Given their social nature, focus groups appeal to adolescent girls who are often more comfortable being with their peers (Krueger, 1998). It is important to note that there is the risk of outspoken participants taking over a discussion and other participants not actively taking part (Litosseliti, 2003); however, the researcher paid careful attention to the group dynamics to ensure every participant had a voice. This study’s design included four separate focus groups. Usually between three and five focus group sessions are required in order to identify recurring themes and issues (Daly, 2009).

Participants

The population for this study consisted of thirteen self-identified African American adolescent girls between the ages of 13 and 17 in grades 9 through 12 who were participants in an organized Amateur Athletic Union (AAU) volleyball program. This age group was selected because these girls are able to cognitively reflect on their participation in organized sport or physical activity programs during middle school (grades 6-8), when there is a decline in physical activity participation among girls (Felton et al., 2002; Kimm et al., 2002), and high school (grades 9-12). Additionally, they can provide their thinking behind the decisions made to continue if challenges or barriers were encountered.

Table 1 provides an overview of each participant’s demographic information. The average age of participants was 15.46 years (SD=1.51), with ages ranging from 13 to 17 years. All of the girls were in high school in grades 9 (n=4), 10 (n=1), 11 (n=3), and 12
Eight of the participants reported living within the metropolitan area (urban) while the other five lived in the suburbs of the metropolitan area.

Table 1. Participant Demographics

<table>
<thead>
<tr>
<th>Participant Demographics:</th>
<th>Pseudonym</th>
<th>Age</th>
<th>Grade</th>
<th>City of Residence</th>
<th>Grade started volleyball</th>
<th>Grade started AAU volleyball</th>
<th>Family Structure</th>
</tr>
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<tbody>
<tr>
<td>Focus Group #1</td>
<td>Christal</td>
<td>17</td>
<td>12</td>
<td>Suburban</td>
<td>6</td>
<td>8</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td></td>
<td>Marie</td>
<td>16</td>
<td>11</td>
<td>Suburban</td>
<td>7</td>
<td>10</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td></td>
<td>Michelle</td>
<td>16</td>
<td>11</td>
<td>Urban</td>
<td>6</td>
<td>9</td>
<td>Lives with mother only</td>
</tr>
<tr>
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<td>15</td>
<td>11</td>
<td>Urban</td>
<td>7</td>
<td>7</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td></td>
<td>Keisha</td>
<td>14</td>
<td>9</td>
<td>Suburban</td>
<td>6</td>
<td>7</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td></td>
<td>Jennifer</td>
<td>17</td>
<td>12</td>
<td>Urban</td>
<td>6</td>
<td>10</td>
<td>Lives with mother only</td>
</tr>
<tr>
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<td>17</td>
<td>12</td>
<td>Urban</td>
<td>6</td>
<td>8</td>
<td>Lives with mother only</td>
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<td>12</td>
<td>Urban</td>
<td>7</td>
<td>7</td>
<td>Other - Lives with aunt and uncle</td>
</tr>
<tr>
<td></td>
<td>Tiffany</td>
<td>17</td>
<td>12</td>
<td>Urban</td>
<td>9</td>
<td>9</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td>Focus Group #4</td>
<td>Maya</td>
<td>14</td>
<td>9</td>
<td>Urban</td>
<td>7</td>
<td>7</td>
<td>Lives with mother only</td>
</tr>
<tr>
<td></td>
<td>Angie</td>
<td>13</td>
<td>9</td>
<td>Urban</td>
<td>5</td>
<td>7</td>
<td>Lives with mother and father</td>
</tr>
<tr>
<td></td>
<td>Bridget</td>
<td>14</td>
<td>9</td>
<td>Urban</td>
<td>5</td>
<td>8</td>
<td>Lives with mother and father</td>
</tr>
</tbody>
</table>
The majority of participants (n=12) began playing volleyball in middle school. One participant did not start playing volleyball until the ninth grade. Girls typically did not begin playing AAU until 7th (n=5) and 8th (n=4) grades. Four girls did not begin playing AAU volleyball until high school. Eight participants reported living with both their mother and father. In contrast, four participants lived only with their mother while one lived with her extended family (aunt and uncle).

Instruments

**Demographic Survey.** Prior to the commencement of each focus group session, participants were asked to complete a short demographic survey (Appendix A). Questions on the survey were included to gather information about their age, grade, city of residence, race/ethnicity, and their sport/physical activity background. Additional questions included the sport(s) or physical activity(s) that the participants regularly participated in and sport(s) or physical activity(s) they participated in when they were in middle school. These questions provided background information about each participant and confirmed that they met the inclusion criteria for participation.

**Interview Guide.** A semi-structured interview guide was used during the focus group interviews (Appendix B). The semi-structured interview is typically recommended by experienced qualitative researchers and involves developing a general set of questions that are asked of all participants; however, the interviewer has the flexibility to vary the questions based on the responses of the participants (Lichtman, 2006). All of the questions were structured as open-ended questions to allow opportunities for participants to elaborate on key topics and were in the form of introductory, transition, key, and ending questions to be used to gather data to answer the overall research questions (Krueger &
Keisha, 2009). Probes were used to encourage participants to share their experiences in detail and to provide justification and clarification for their responses. The interview guide consisted of several questions including “Who were the people who were most instrumental in getting you involved in sport?”, “What are the reasons why you participate in sport and physical activity and stay involved?”, “Has there been anything that has made it difficult for you to participate in sport and physical activity?”, “As active sport participants, how have you been able to overcome some of the challenges and barriers you have mentioned?”, and “What can be done to encourage more young girls to participate in sport and physical activity and keep them involved?”

The interview guide was developed based on the literature review and the study’s research questions. The relationship between research questions, focus group questions, and theoretical framework is shown in Appendix C. The interview guide was peer reviewed by the primary investigator’s academic advisor and one of her committee members that has expertise in qualitative methods as well as a group of colleagues that have experience in qualitative research and in working with adolescents. A pilot focus group interview was conducted with four adolescent African American girls to test the questions for clarity and potential responses. Based on the feedback gathered from the focus group, the wording of two questions was adjusted to improve clarity.

**Data Collection Procedures**

Approval for this study was sought and obtained through the Michigan State University Institutional Review Board (IRB). Prior to the study, participants were required to complete and sign an assent form (Appendix D) and their parents were required to
complete and sign a parent/guardian consent form (Appendix E) to indicate their understanding of the study and willingness to participate.

**Participant Recruitment.** A variety of recruitment methods were employed to encourage girls to participate in the study. Several high school and AAU volleyball teams in a major metropolitan area were targeted for participant recruitment to take advantage of relationships the primary investigator has established. She is active in the volleyball community in the area and has relationships with high school and AAU volleyball coaches, providing additional access to participants.

The primary investigator attended a summer volleyball league that was held for African American girls from across the city. After obtaining permission from the league administrator, time was set aside for the investigator to address the girls about the study and to distribute consent and assent forms. Interested participants who met the inclusion criteria for the study received an explanation of the study, expectations of the study participants, and how information obtained from the focus group sessions would be used. They also received the parental consent form for their parent/guardian and the assent form for them to read over and sign. Based on interest generated from the initial meeting, individual athletes signed up for a time to participate in a focus group interview.

While the original intent was to only recruit girls that lived in urban areas, several girls that were interested in participating lived just on the outskirts of the city. These girls were allowed to participate because they all spent a significant amount of time in the city. All of the participants went to school in the city, participated in AAU programs based in the city and participated in volleyball related skills clinics, camps, and leagues within city limits.
Incentives were offered to participants, as it can often be difficult to recruit an ample number of participants in urban environments. Participants were offered $20 for their participation in the focus group. Participants that returned to participate in the member checking process several weeks after the conclusion of the focus groups and preliminary data analysis received an additional $10 for their participation.

Focus Group Interviews. The primary investigator served as the moderator of each focus group given her familiarity with the research topic and development of the interview guide. The responsibilities of the moderator included asking questions, keeping the girls on task and focused on the topic and ensuring they were comfortable while listening to the girls' responses in order to gain insight and understanding of their shared perspectives. It was important for the moderator to offer encouragement and reassurance in response to the stories and perspectives the girls shared.

Three to four girls participated in each focus group session. This number allowed girls the opportunity to express their opinions and perspectives without competing with each other for talking time and provided a more comfortable environment for the participants to share their thoughts with others (Krueger & Keisha, 2009). It also allowed the moderator to conduct more efficient focus groups that yielded richer data. The initial goal was to interview fifteen girls but after the conclusion of the fourth focus group, it was determined by the primary investigator and her advisor that conducting an additional focus group would not result in new emerging ideas and that saturation in what was being said had been reached at thirteen girls.

Girls were not allowed to participate in the focus groups unless both the parent and adolescent submitted a signed consent/assent form to participate in the study. After
participants that met the inclusion criteria enrolled in the study, a date and time for each focus group session was arranged based on their availability.

Consideration of the location and venue of a focus group is a crucial aspect in the planning of focus group research as it can enhance a productive group discussion (Liamputtong, 2011). Every attempt was made to schedule focus group interviews within two weeks of the initial meeting and in a place in a safe and familiar environment for the girls. For the convenience of the girls and to encourage participation, the primary investigator was offered a room to utilize for focus group interviews in the building where the summer league took place. Interview times were set an hour before the time the league started so girls could come in before the start of league play, participate in the focus group interview, and then go down to the gym to play volleyball. Over the course of two weeks, interviews were scheduled on Tuesdays and Thursdays. At the conclusion of the two weeks, the summer league ended and three focus groups had been conducted. An additional focus group was conducted approximately a month later with three additional girls. This focus group was conducted in an office in their school after a practice. The participants in each group were well acquainted with each other which aided in the comfort of the girls and contributed to an interactive group discussion.

Prior to the start of the focus group session, the primary investigator read the assent forms aloud while participants followed along. Participants were asked if they had any questions prior to their participation. The consent and assent forms were then collected from each participant. Demographic surveys were distributed to participants to complete. Snacks were provided and were available while the surveys were being completed. Once the surveys were completed and collected, they were perused quickly by the primary
investigator to get a brief understanding of the background of the participants after which the focus group commenced. Each girl was asked to select a pseudonym that they would be referred to during the interview and in the data analysis.

Each focus group began with an introduction about the project and a reminder about consent and confidentiality. The rules and guidelines about the format of the focus group were reviewed as well. The moderator stressed that responses would differ among participants and that there were no right or wrong answers. It was also emphasized that each girl should respect the opinions of others. Girls were reminded that the sessions were being audio and video taped and that they could decline to participate at any time.

Each focus group discussion was recorded in two ways: through an audio recording and through a video recording. High-quality recording equipment was used to ensure conversations were accurately captured during each focus group session. All audiotaped discussions were transcribed verbatim by a qualified and experienced transcriptionist. These transcriptions were verified using the video recorded discussions to ensure the accuracy of each participant’s responses and data integrity. The use of a video recording of each session also allowed the researcher to review sessions and make accurate observations of the participants’ behavior.

Additionally, brief notes were taken by the primary investigator to record observations made during each session including body language, nonverbal behaviors, the emotional climate, and the reactions of participants to discussions. Notes recorded during the focus groups were kept brief with the majority of notes being recorded by the primary investigator immediately after the focus group. Strategies that worked well within each session as well as areas for improvement were also recorded.
Focus group sessions lasted between 50 – 75 minutes. At the conclusion of each focus group interview session, participants were thanked, and given the $20 cash. Participants were reminded that the data gathered during the focus group would not include the use of their names as their pseudonyms were used to identify quotes.

**Reflections as a Researcher**

In order to ensure the trustworthiness of the findings, it is important that I share the experiences I bring to this research project as the primary investigator. My interest in helping girls become more active and sustain their activity level stems from my experiences as an African American female adolescent. I was physically active and participated in every sport program that was offered. As I reflect back on my middle school years, I remember many of my friends no longer wanting to play on the basketball, volleyball, and softball teams around 7th and 8th grades. One major reason was that my friends became more concerned about impressing their peers and being an athlete no longer fit their image. While I remained active throughout middle and high school, other girls seemed to be disengaged and uninterested in sports and physical activity. I have also had the opportunity as an adult to work with adolescent girls where I have observed similar patterns among girls around the same age. However, in my work at the Boys & Girls Club, I noticed that girls will come out if physical activity programming is provided. For several summers, I offered a program for girls only that introduced girls to the importance of being active and eating healthy as well as exposed them to a variety of physical activities. This program led to my first research project that introduced girls to flag football and investigated their perspectives on playing a male-dominated sport. The findings from this research project showed that girls enjoyed playing and were interested in continuing to
play flag football, even though it is often labeled as a sport for boys only. However, many girls had never played because opportunities did not exist for them to participate on the same level that boys did.

Through these experiences, I became interested in focusing my research on physical activity among adolescent girls. My interest in investigating how to get more African American girls involved in sport and physical activity led me to my current study. My personal and professional experiences give me knowledgeable insight into the barriers girls experience that exist in recruiting and retaining girls in sport and physical activity. I was blessed that my parents were supportive of my physical activity pursuits and provided transportation to and from activities as well as the financial assistance to participate in specialized training. However, I realize some girls do not have the same luxuries which hinder their opportunities to participate in physical activity programming. It is my hope that this study will allow me to further explore the reasons behind the decline in sport and physical activity among African American girls by learning the strategies and ways girls overcome the barriers to participation. In addition, this study will seek to identify the type of interventions and programs that would encourage them to embrace a physically active lifestyle.

**Data Analysis Procedures**

The focus group data were transcribed, coded, and analyzed inductively using a modified grounded theory approach (Glaser & Strauss, 1967) to discover relationships, themes, and categories in the data. Data analysis was conducted to answer the following research questions: (a) What are the challenges and barriers girls faced while participating in sport? (b) What strategies, techniques and support systems did they utilize to overcome
these challenges and barriers? and (c) What are the components of quality sports programs that engage girls and keep them participating in sport? A complete analysis was conducted to determine the common themes as well as unique responses for each research question. Data analysis was conducted simultaneous to the data collection process throughout this study.

**Data Transcription.** Audio recordings were utilized to record each of the focus group sessions. Video recordings were also used to check for accuracy in the transcripts and to confirm the identity of specific respondents. Recordings were transcribed verbatim and transcriptions were coded using content analysis (Strauss & Corbin, 1998) to identify significant themes in the data. A professional transcriber was used to transcribe the data to ensure data were available to be analyzed in a timely manner; however, the primary investigator reviewed the transcriptions with the recordings to confirm accuracy and allow familiarity and immersion in the data to understand the participant’s responses and elicit meaning. The data collected from the demographics questionnaire were analyzed and reported using the most recent version of the Statistical Package for the Social Sciences (SPSS).

Preliminary data analysis began after each focus group session. Overall impressions that included nonverbal feedback and notable verbal responses were summarized at the end of each focus group. Additionally, the primary investigator made note of any important themes and ideas that emerged as well as things that could be adjusted for the next focus group.

Two experienced external researchers were consulted to review and assist in analyzing the data to avoid bias on the part of the primary investigator and to ensure the
responses of the participants were correctly interpreted. Both researchers were experienced in qualitative methodologies and assisted in the identification of categories, codes, and themes. Any discrepancies found among researchers were discussed until an agreement was reached and consensus was obtained.

Coding Data. There are three stages in grounded theory data analysis. Open and axial coding were used to formulate categories and subcategories and selective coding was used to connect the categories and subcategories into one central category (Creswell, 2007). Open coding was the first step in the data analysis process which involved taking the focus group data and segmenting it into categories of information (Strauss & Corbin, 1998). Open coding occurs simultaneously with data collection. Transcripts were reviewed continuously to identify words and phrases that have significance based on the purpose of the study and the research questions posed. Constant comparison was used to develop and cluster codes together into categories and subcategories based on similarities found in participant responses. Axial coding was the second step in the coding process.

Axial coding is the process of relating categories of information to the central phenomenon category (Strauss & Corbin, 1998). During this process, categories determined in the open coding process were compared with each other to make connections between the categories to identify relationships. Selective coding was the final phase of coding the data. During this process the core category or central phenomenon was identified and was systematically related to other categories, validating the relationships and filling in categories that need further refinement and development (Strauss & Corbin, 1998).
Trustworthiness. In order to present a qualitative study that is considered credible, it is necessary to ensure trustworthiness and credibility of the data presented (Lincoln & Guba, 1985). The trustworthiness of this study was established through the use of several techniques including peer review, reflexive analysis, member checks and, an audit trail (Creswell 2007; Creswell & Miller, 2000; Lincoln & Guba, 1985).

Peer review, which is “the review of the data and research process by someone who is familiar with the research or the phenomenon being explored” (Creswell & Miller, 2000) was used in this study. The two previously mentioned external researchers with experience in qualitative methodologies and physical activity research were consulted to assist with the data analysis process. They specifically assisted with examining the transcripts and the identification of categories and themes within the data. Findings were compared to verify the content of the analyses. Verifying the interpretation of the data by more than one researcher increases the credibility of the findings. The two external researchers as well as the primary investigator’s advisor reviewed the final written findings to confirm consensus of the agreed upon themes and to ensure the themes were accurately interpreted.

The primary researcher returned to her reflexivity statement where her assumptions and biases were disclosed before the start of the analysis process as well as throughout the analysis process. It is important to acknowledge personal beliefs and biases in the research and analysis process so as not to pre-judge the data or influence the meanings expressed by the participants, improving the validity of the study. Additionally, the race and gender of the primary investigator may have made the African American girls more comfortable and willing to share their stories.
Member checking consists of taking data and interpretations back to the participants in the study allowing them to confirm the credibility of the findings (Creswell & Miller, 2000) and determine if their stories were accurately reported. Within several weeks of the last focus group session, the data were transcribed and open coding was completed. Participants were contacted to participate in a member checking session where transcripts were verified and themes identified during open coding were shared with the participants to be reviewed for accuracy. Coincidentally, all of the study participants went to one of three high schools in the area so the primary investigator went to each of the three school sites to meet with the girls for the member check session.

Girls were asked to answer three additional demographic questions that asked about their family structure and the number of years they played AAU volleyball. Girls were also provided with portions of the transcript to review for accuracy. Each document provided was individualized for each girl and included her statements in response to the main research questions. Additionally, a list of emerging themes based on the preliminary analysis of the data was provided for each girl to review to validate the interpretations of the data. Each member check meeting took approximately 15 minutes. All of the girls that participated in the member checking process found both their statements and the themes provided for them to review to be accurate and made no additional comments. Most of the girls that participated in the focus group interviews participated in the member checking session (n=12) and received an additional $10 for their efforts.

A detailed record of the research process was kept to establish an audit trail and to ensure the trustworthiness of the study. A journal was maintained to record personal reflections of interactions and feedback from the girls after each focus group session. The
journal also included thoughts about how well the sessions were conducted and any questions that evolved throughout the process.
CHAPTER 4

RESULTS

Overview

The primary goal of this study was to address the barriers African American adolescent girls experience in participating in sports and physical activity programs and identify strategies used by girls who overcome the barriers. Additionally, this study sought to better understand the components of quality sports and physical activity programming that will engage and encourage continued participation among this population. This chapter outlines the analysis and themes of the data that emerged from the focus group questions. Themes are organized according to each of the study's research questions: (a) What were the challenges and barriers girls faced while participating in sport?, (b) What strategies, techniques, and support systems did they utilize to overcome these challenges and barriers?, and (c) What are the components of quality sports programs that engage girls and keep them participating in sport?

Sport and Physical Activity Background of Participants

Girls were asked about their participation in sport and physical activity from the 3rd through the 12th grades. A comprehensive list of activities was provided on the demographic survey for girls to check with the option to add activities if they were not listed. A total of 16 sports and physical activities were reported. All of the participants reported participating in more than one sport and/or physical activity since elementary school. Details on sports and physical activity participation are summarized in Table 2. The table displays the responses from the question: “In the chart below, please check the sports & physical activities you have participated in and when you participated in them.”
Table 2. *Sports and Physical Activities of Participants*

<table>
<thead>
<tr>
<th>Sports &amp; Physical Activities</th>
<th>Elementary School 3&lt;sup&gt;rd&lt;/sup&gt; -5&lt;sup&gt;th&lt;/sup&gt; grades</th>
<th>Middle School 6&lt;sup&gt;th&lt;/sup&gt; -8&lt;sup&gt;th&lt;/sup&gt; grades</th>
<th>High School 9&lt;sup&gt;th&lt;/sup&gt; -12&lt;sup&gt;th&lt;/sup&gt; grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>11</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Jogging</td>
<td>9</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Swimming</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Bicycling</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Volleyball</td>
<td>4</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Tennis</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bowling</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Dancing</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Cheerleading</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Basketball</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Football</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Soccer</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Softball/Baseball</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Outside Activities (e.g. tag, jump rope)</td>
<td>9</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Other - Track</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Most of the girls did not start playing volleyball until middle school (n=12) with only four having participated in volleyball in elementary school. The most popular sports and physical activities were walking, jogging, volleyball and outside activities like tag games and jump rope.

When asked who were the people who were most instrumental in getting them involved in sport, girls named a variety of influences including both their mother and father
as well as their siblings and extended family which is consistent with previous findings
(Bruening et al., 2008; Vu et al., 2006) where family was identified as the most influential
factor in their participation. In many cases, an entire family was a sport-involved family so
it was only natural for them to be involved as well. Rosie shared that because her whole
family (cousins, uncles, and grandfather) played sports, she did not want to be “the odd one
out” so she decided to play.

Reasons for participating in sport and physical activity were consistent with other
research (e.g.,; Dwyer et al., 2006; Ewing & Seefeldt, 1996; Taylor et al., 1999; Tergerson &
King 2002) and varied from being with friends and teammates, experiencing the health
benefits of being active, and having fun. Additionally, girls said it gave them something to
do, it served as a stress reliever and they were encouraged to participate by their coach or
parents. Several girls identified competitiveness as a reason to participate in sport. In
contrast, Dwyer and colleagues (2006) have concluded that girls do not like to be
competitive and are more drawn to cooperative environments.

Challenges and Barriers in Sport Participation

Girls were asked to identify challenges and barriers they faced while participating in
sport. The selective codes that emerged are outlined in Table 3 along with the number of
open codes and the number of participants identifying each theme. Further detail is
presented in Table 4 which displays the breakdown of axial codes and number of open
codes for each axial code. Each theme will be presented with supporting quotes below.
### Table 3. Challenges and Barriers in Sport Participation

<table>
<thead>
<tr>
<th>Selective Codes</th>
<th>Number of Open Codes</th>
<th>Number of Participants Identifying Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns regarding image</td>
<td>63</td>
<td>12</td>
</tr>
<tr>
<td>Identity related issues (race/gender)</td>
<td>40</td>
<td>11</td>
</tr>
<tr>
<td>Criticism from significant others</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>Resources/access limitations</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>Lack of skills and ability</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Negative influence of coach</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Challenging aspects of sport participation</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>Limited social support</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>Balancing time demands</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>8</td>
</tr>
</tbody>
</table>

### Table 4. Selective and Axial Codes: Challenges and Barriers in Sport Participation

<table>
<thead>
<tr>
<th>Selective Codes</th>
<th>Axial Codes</th>
<th>Number of Open Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns regarding image (63 open codes)</td>
<td>Body image concerns</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Concern about &quot;girly&quot; image</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Concern about &quot;girly&quot; image - hair</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Difficulties managing hair while participating</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Not the &quot;right&quot; body</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Uniform concerns</td>
<td>13</td>
</tr>
<tr>
<td>Selective Codes</td>
<td>Axial Codes</td>
<td>Number of Open Codes</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Identity related issues (race/gender) (40 open codes)</td>
<td>Challenges with boys making negative comments</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Experiences with racism</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Influence of stereotypes with female sport participation</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Issues with playing certain sports</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Lack of exposure to female African American athletes as role models</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lack of exposure to female sports</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Negative gender stereotypes</td>
<td>1</td>
</tr>
<tr>
<td>Criticism from significant others (39 open codes)</td>
<td>Negative influence of parent</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Teasing from siblings</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Negative influence of teammates</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Negative influence/ comments</td>
<td>1</td>
</tr>
<tr>
<td>Resources/access limitations (37 open codes)</td>
<td>Cost of programs</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Issues with neighborhood safety</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Lack of transportation to programs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Limited community resources for participating in sport/physical activity</td>
<td>14</td>
</tr>
<tr>
<td>Lack of skills and ability (36 open codes)</td>
<td>Lack of confidence in skills/abilities</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Lack of knowledge about the game</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lack of skill/ability</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Did not start the sport early</td>
<td>1</td>
</tr>
<tr>
<td>Negative influence of coaches (35 open codes)</td>
<td>Negative influence of coaches</td>
<td>35</td>
</tr>
<tr>
<td>Challenging aspects of sport participation (32 open codes)</td>
<td>Other Interests</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Does not like conditioning</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Limited amount of playing time</td>
<td>9</td>
</tr>
<tr>
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**Table 4 (cont’d)**

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<td>Keeping Up Grades</td>
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<td>Attracting sexual predators</td>
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<td></td>
<td>Difficult decision on choosing sport</td>
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</tr>
<tr>
<td></td>
<td>Health/physical Issues</td>
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</tr>
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<td>Balancing time demands (13 open codes)</td>
<td>Difficulty balancing time/ Time management</td>
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<td>Lack of time to spend with friends</td>
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<td>TOTAL OPEN CODES</td>
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**Concerns Regarding Image.** Concerns regarding image was the main challenge discussed by most of the girls (n=12) as shown in Table 3. Subthemes included difficulties managing hair while participating, concerns about a “girly” image, uniform concerns, and body image concerns. Most of the girls (n=8) said their hair has made it difficult for them to participate. None of the girls felt comfortable wearing their hair down while participating in sport, thus, forcing them to come up with creative ways to wear their hair. When describing how her hair has impacted her participation, Marie explained: “My hair has been an issue so many times because when I play, I know I sweat a lot, and my hair sweats out the most because no matter what I try to do to it, the next day it’s messed up.”
She further explained: “It’s been an issue, but I’m trying to manage my hair, but it can be a lot every night trying to get it back straight how it was and it can be too much.” Tonya does not like when her hair gets puffy due to sweating because it looks a mess. Kelli added that she sometimes missed practice because she had just gotten her hair done and was not willing to ruin her hairstyle.

Body image concerns were another subtheme. Girls have been told they are too skinny, too short, and too big to participate or be successful in sport. Christal shared the following:

I always thought well, like my daddy, he made jokes about us [my sister and me], but it was just out of fun. But he used to always say we was [sic] too big to play volleyball and stuff like that. But he wasn’t calling us big, he just told us like if we was [sic] smaller than what we are, we can be fast and quick on our feet and stuff. So that kind of … I don’t know… I mean, I used to get mad at it, but then now, it’s like I’m doing it to myself, so I can’t get mad. Like I eat a lot of junk food. Like I’m addicted to junk food, so I keep gaining weight.

Girls also worried about their size, particularly in uniform, which influenced their image concerns. Several of the girls said that wearing the spandex shorts that volleyball players wear are too tight and short, making them uncomfortable. Tonya shared that in middle school, she wore basketball shorts and when she got to high school, “it was bad”. Tiffany added that at first she was not comfortable with the uniform at all because she was not used to how tight they were and she felt exposed:

When I first started playing, it was so different because you know I’m used to shorts, always used to long shorts and we start off with spandex and I’m like, you know, pulling mine down (laughter).

While Christal did not have a problem with wearing spandex, other girls on the team that were bigger in size had a problem wearing them:

There were a couple girls on my team that were bigger, so when all the other girls wanted the short spandex, and they have a problem wearing them, they
always wanted the long ones because you know how they have the spandex, so like we used to argue about it all the time.

Several girls also mentioned getting wedgies in their uniform shorts causing them to constantly have to pull their shorts down. Marie notes “no matter which way you move, you will get a wedgie”.

Participants also reported how other girls worry about their “girly” image and it hinders their participation. Jennifer said “There are not enough African American female athletes because girls don’t get involved anymore because they are worried about their appearance and getting cute when they get in high school but they should still do it.” This was confirmed by Keisha, who shared, “People that don’t participate in sport because they are worried about their appearance and looking cute have their priorities mixed up and that stops a lot of African Americans.”

**Identity Related Issues (Race/Gender).** The second theme that emerged as a challenge for girls’ participation was identity-related issues (race/gender). Several girls reported that boys have told them that girls cannot play sports and have discouraged them from participating. The following comments were made:

Boys don’t want them to participate in sports and are like, “Oh you’re a girl, you can’t do that.” (Brandi)

If a boy is watching her at practice, she will get nervous because she doesn’t want to mess up so they don’t have an opportunity to say something or laugh at her. (Maya)

Sometimes she would get distracted during practice when the boys basketball team would run around the track and say things like “You can’t play. I can play better than you”. (Marie)

The influence of stereotypes with female participation and issues with playing certain sports were also cited as a barrier to participation. Many of the girls have been
discouraged from participation due to gender stereotyping. Angie was discouraged from playing basketball.

Yes, basketball, I actually really wanted to play basketball, but people were saying boys play basketball better than girls...so I just really stopped thinking about basketball and now I really don’t like basketball anymore because they got that into my head.

Lack of exposure to role models was cited as a challenge for participation with most of the girls thinking there are not enough African American female athletes.

I did a project in school and it was on women in sports and like in the older days it was a lot of like Caucasians, you never really saw like African Americans. I thought that was kind of weird. In like volleyball, I don’t know. (Christal)

Sometimes the media can like not make me want to quit but make me think why do they think that only Caucasian people play? (Marie)

Yeah, this basketball coach was talking to me. He really wanted me to play and I was like, “I have volleyball”, just know that the answers no because I have volleyball. He was like, “how many volleyball girls do you know that made it from the city?”, and I was like why ... I’m like there are black girls who have did it, but yeah there could be more. But we still need to acknowledge the fact that there are African-American women doing it. (Rosie)

Although not widespread among all of the girls, at least one girl mentioned experiences with racism, negative gender stereotypes, and lack of exposure to female sports as additional barriers.

Well like a couple of tournaments we used to go to, a lot of the teams, like the players’ mom’s, was Caucasian and they used to talk about us. And it kind of like, the team used to say well we don’t want to be here because there is a lot of racism. (Christol)

I would like to play football. (Laughter). I like playing football even when I’m just outside throwing the ball to my daddy or my cousin, like it’s very fun . I would want to try out but like they don’t let girls play. (Keisha)

I don’t think there is a lot of exposure for women’s sports. Like it’s out there but really people care about the play-offs and the Superbowl. You don’t hear
about volleyball championships and tennis championships. You just hear about football and basketball a little bit of baseball and, honestly, hockey too. (Kelli)

**Criticism from Significant Others.** All of the girls mentioned receiving critical support from others including parents, teammates, and siblings. Nine girls specifically mentioned the negative influence of parents. Tonya said her parents have made it difficult for her when they yell at her at games: “Because I understand they want you to do better, but sometimes they have to understand that you can make mistakes; you’re not going to be perfect.” Brandi added that her dad tries to coach her while she is on the court in the middle of a game.

My dad, he tries to coach me while I’m on the court in the middle of the game, just yelling from the stands and I’m trying to concentrate, a person serving and he yells “Brandi, blah blah blah.” I’m like “Oh my God why is he ...” I’m like “Stop talking, I’m trying to concentrate, just focus.”

After games, Tiffany’s mom gives her feedback like “You need to hit harder, you need to get back quick, you need to block, actually touch the ball.” and it sometimes would get annoying. Angie’s dad was mostly the one to make it difficult for her because if she does something wrong, he will look at her and shake his head.

And I will always be down because I actually look up to him. So, he was really most of the reason me feeling kind of down and everything...

Nine girls also mentioned the negative influence of teammates. In the 9th grade, Rosie started on varsity and other girls were mean to her although it did not stop her from playing. Jennifer once told her coach that she was not coming back anymore because the other girls were not serious and she did not want to waste her time and they were not doing anything. Tiffany added that there are some players “that bring attitudes and it just brings the game down”. Michelle shared the same idea:
It is not fun at all when everyone on the court has an attitude or players aren’t excited or are not cheering.

Additionally, two participants noted teasing from siblings as a challenge to their participation in volleyball.

**Resources/Access Limitations.** In all of the focus group discussions, limited resources and access limitations were mentioned as potential barriers to participation. The cost of some sport and physical activity programs may discourage girls from participating. Michelle shared that she has experienced financial limitations in the past:

…it’s certain things that you have to do outside of practice to make you a better player. So like going to camps was an issue when I was younger because it was only my mom. So it was like kind of hard because she was taking care of three of us.

Similarly, Tonya shared an example of how program costs have affected her:

Well, for me the AAU, it was expensive but we still did it. I don't know, it was around Christmas time and they had to pay for it. It took away some of my presents, but I still got what I wanted eventually.

Many of the girls (n=9) did not feel safe in their neighborhoods, even the players that lived in the suburbs. Bridget is not allowed to walk around outside because it is not safe anywhere, even in the suburbs. Marie expressed the following:

…but sometimes, it’s not safe. You’ll hear sounds, and it’s like, “What was that?” Even though it’s out in the suburbs, it’s still not safe. It’s dangerous.

Marie also discussed the lack of transportation to programs being a barrier for some girls. Transportation issues were the biggest problem she encountered when participating.

No, it was just hard cause sometimes like where I went to school at, it was farther from where my parents worked. My parents worked out in the suburbs, and I went to school in like downtown [city], and it was a far distance for them to come back and forth.
The limited community resources available to girls were mentioned. There simply were not enough places to participate in sport and physical activity in their communities. Generally, there were no recreation or community centers in their neighborhoods and they all have to leave their community to participate in volleyball.

And like a lot of recreation centers that are in other cities that's kind of close, you have to live there, so I really don’t have nowhere to play volleyball. (Christal)

I just know there's one rec center, but where I live, it’s kind of like some ways. But in the city, it’s not one, but I think there should be one because there’s a lot of kids outside playing, and they could be in the gym doing something. (Marie)

I don’t even know where one [recreation center] is where I live at. I mean it’s a school across the street so it’s a track, you know, but most people don’t think that’s fun. They just not going to get on track unless they really trying to be physical, but for the kids and stuff nope there’s nothing. (Jennifer)

**Lack of Skill and Ability.** All of the girls mentioned lack of skills and ability as challenges they faced in their participation in volleyball. Most of the girls expressed times when they did not feel confident in their skills and abilities playing volleyball. Maya has had feelings that not being good at her sport made her not want to participate because she did not want to let her team down: “...I just didn’t want people to just be in my ear ‘you let us down, you let us down’”. When she was a freshman, Marie watched the varsity team play and was kind of scared because she knew she could not play like that and it affected how she tried out. Several girls expressed a lack of confidence particularly when they go away to tournaments.

Sometimes when I go to tournaments out of state, there are girls that are so good, like they’re my age, I was “Well, dang, they’re good and I’m not that good” but I keep going. (Tonya)
When we go to different tournaments and you see other girls who are way, way better, it’s like “Oh they’re good. What am I? What am I doing?”
(laughter) (Kelli)

Michelle had a hard time when she first started playing because she did not have the knowledge about volleyball like the other players:

I felt like that when I first started because I didn’t know what position I played well. So it was hard for me, and then it’s like the little knowledge that I did have about volleyball, it was like well I noticed everybody knew everything else. So, it’s like I was stuck on the court, like “what do I do next?”

When discussing volleyball skills, several girls discussed how their struggles with passing, serving, and setting were challenges when they first started playing the game. Bridget struggled with serving and feels she does not have the power to serve it long so it goes short or she has to put her whole body into it. Brandi had thoughts about dropping out of volleyball when she was little because she felt like it was too much. But as she stayed and gained more skills, she got used to it. At times, the game was not fun to Tonya because she felt her skills were not at the same level as the other girls.

Tiffany was the only participant that did not start playing volleyball until she was in high school and she discussed her regrets:

I also feel the same way, like seeing someone else just spike the ball down real hard. I want to do that, what do I got to work on? And you know it kind of makes me regret not starting earlier, so I could have worked up to it, instead of starting ninth grade year. I just now got to work hard.

**Negative Influence of Coach.** With the exception of one of the players, all of the girls expressed negative experiences with a coach.

There was one coach that made me feel like that just this past season. Like she made me not feel like...like I just didn’t want to play no more... (Christal)

The negative influence of the coach ranged from favoritism, lack of knowledge about the game, lack of playing time, a losing team, and being rude.
Several participants felt their coaches exhibited favoritism towards other particular players, making it difficult for them to continue playing.

Sometimes, there is favoritism, and I feel like it’s not fair to all the rest of the players. It’s six people on the court, but you still have to give everybody enough playing time no matter what their skills are because that’s what they’re on a team for, to play. You can’t just have them sitting down. (Marie)

I’d just say my thing was the favoritism cause I didn’t like that, and my AAU coach she did that a lot, so it was like okay well she got her favorites...she made me not want to play or change to a different team... (Christal)

Favoritism shown by coaches often leads to other players not receiving what they feel to be adequate playing time.

...I had this one coach who didn’t put me in at any time...like I always be the bench warmer and so it kind of hurt me. (Bridget)

I didn’t get a lot of playing time, and for some reason, it always seemed like she was picking on me. I was doing stuff, but I wasn’t doing nothing that bad where you just pick on me all the time. So I just felt like volleyball wasn’t for me. (Christal)

Players are aware when coaches do not know a lot about the game of volleyball or lack the knowledge to properly train players.

I don’t know because she was a DS [defensive specialist] or a Libero, so she doesn’t really know how to hit or set. So, she just really coaches back row. And then she get other people for the middles, she really don’t care about the setters too much...she knows the game but she doesn’t know how to coach it properly. (Kelli)

Coaches’ lack of knowledge often leads to a lack of team success on the court.

Well he like, I don’t know, I didn’t want to play anymore because we used to lose like every game. Like our record was zero and nine and stuff. (Keisha)

A major challenge girls experienced with their coaches were coaches that were rude and in some cases demeaning as well as coaches that always yelled.

... when the coaches yell, I be like “Oh my God, I can’t do this”... (Brandi)
In ninth grade, AAU, I had a coach that was always on my back, always. Everything I did was either sloppy, too slow, not correct. (Tiffany)

My AAU coach, he is always on my back...He’s always on me no matter what I do. If it’s a good hit, “Tonya, get your arm up; Tonya do this, Tonya do that.” (Tonya)

My old coach, if you did one thing wrong then he would yell at you. Like, I made a stupid mistake in one game... and he was like “Come on girl! What are you doing, Maya?” (Maya)

...the varsity coach, I felt like he try to hurt people's feelings on purpose, and I think as a coach, you’re supposed to make the players better and not like bring them down. And that’s the only reason that made me not want to play...the coach he can be a little well more than a little, he can be rude, but it’s just like sometimes, you don't have to be that hard on us because it’s not going to make us better if you’re like being mean, being rude. (Marie)

**Challenging Aspects of Sport Participation.** Ten girls identified a variety of challenging aspects of sport participation that include not having fun, having other interests, conditioning, and limited playing time.

When she started a particular AAU club, Tonya felt things 'got serious' and it was not fun anymore. This AAU club was more structured and had higher expectations for her than she was used to. Brandi does not have fun when attitudes collide and everybody gets down on the court while Bridget has had feelings of volleyball not being fun when she is not on the court and sitting on the bench and watching or while others are practicing and she is on the sidelines.

One of the most noteworthy reasons girls did not have fun was due to the actions of their teammates. For Kelli, having fun depends on the people she's around and on the court with because some people she does not like to play with and some people she loves to play with and is okay. Michelle shared similar sentiments:

So it's like when that one person's self-esteem go down, the whole team self-esteem go down cause it's like okay, we're a team, we're as one. So, it was like
that’s not fun at all when everyone have an attitude on the court. So it’s like get back in motion, and go out there, and play your heart out.

Marie did not have fun on her junior varsity team because some of the girls did not get along and it was obvious when they were on the court because they were not communicating. Jennifer described the frustrations she has with her teammates:

Um, like when the team gets down, you know how, they give up in practice like they don’t care no more, but when you get in the game they still don’t be caring. That’s how I be feeling like ... They don’t take practice serious, and they see the mistakes only when they happen in the game.

Another challenging aspect of participation noted by a few girls was conditioning. Christal does not have fun when she has to do conditioning or running and has considered not playing. Several mentioned the possibility of girls having other interests like “partying and hanging out with friends” or “do other things like singing or band” as reasons for a lack of participation. Limited playing time has made participation difficult for Bridget, particularly when her friends ask her “when are you going to get into the game?” Other challenging aspects of sport participation that were mentioned were dislikes for sport/physical activity, lack of motivation, not being valued, and the physicality of other sports (like basketball and football):

I was never picked to be like the designated setter or anything. So that made me just feel like they don’t need me, so why waste my time. (Christal)

I would not play basketball. Too much attitude like arguing with the other team and all that physicalness … Ain’t nobody got time for that (laughter) so I stick to volleyball. We’re across the net (laughter). (Jennifer)

**Limited Social Support.** Most of the girls (n=12) provided examples of how limited social support limited their participation. In some cases, the activities of their siblings were priority over their participation. Michelle was dedicated to playing volleyball so it was frustrating and stressful for her when she had to go somewhere but could not because her
brother had somewhere to go and was given priority because he is older. Christal’s volleyball came second to her sister’s senior activities when her older sister was a senior in high school:

...so it’s like “Okay, well volleyball you’re going to have to hold off on that because your sister graduating and prom and all of that”.

Her family is also more supportive of her younger sister that plays volleyball because she (Christal) is about to graduate and her sister is about to start high school so they want to get her prepared. Bridget added that sometimes her brother will take up the whole driveway/court forcing her on the grass making it difficult for her to practice.

Several girls talked about family support challenges. Jennifer’s mom does not make some of her games because she works and her schedule conflicts. Christal has had to babysit her cousin and take her to practice with her:

I used to have to take her to practice, and she was just bad. So it was kinda hard practicing and telling her what to do and stuff like that.

Several participants mentioned challenges with non-sport friends. Michelle has had to change her selective group of friends because she no longer felt like she had anything in common with some of her friends that did not play sports besides school. Marie also experienced similar challenges. She felt she needed a friend that she could relate to and if they do not play any type of sports, she feels she cannot relate to them. Maya shared that she does not like it when her friends compare her to others: “They will be like oh her jump is like this. Then why is your jump like that?” Lack of support also came from teachers as described by a few participants. Brandi had a teacher that felt she should not miss her class at all. If she had to leave early for a game, the teacher reminds her that if she misses the
lesson, she has to understand that the test is tomorrow and Brandi would respond to herself “Okay Miss Debbie” (sarcastically). Kelli elaborated:

I think teachers don’t understand we have other stuff to do too besides their class, right. (laughter) I understand we’ve got homework, I’m going to do your homework, but we also have a game too. Or like if you have behavior issues they be like “Oh we’re going to tell your coach, you’re not going to play” and all the other stuff. So I think teachers don’t understand.

**Balancing Time Demands.** Six girls talked about the challenge of balancing time demands. Kelli believed time management could be a reason for girls to drop out or not wanting to participate in sport and physical activity. Tonya added that she believes grades can be an issue because girls may not have enough time to get homework done due to being tired after practice. Tiffany shared the following: “There are times I didn’t go for practices cause of school. I had too much homework.”

All of the girls have felt a tug between going out with friends and playing volleyball. For example, Marie shared the following:

Sometimes my friends will like try to stop volleyball. Like they’ll tell me that it’s this party that we can go to, and I be like no I can’t because of volleyball, and then they’re like, “You’re always doing volleyball.”

**Other.** Additional subthemes that were identified but were not found to be significant among a majority of the participants included keeping up with grades, possible injuries, frustration, health and physical issues, difficult decision on choosing sport, poor lifestyle choices, and attracting sexual predators. Salient quotes from these subthemes are provided.

In 6th grade, my grades had went down like real bad, so I stopped playing volleyball for a little while. And I didn’t start back until the 7th grade. (Christal)
When I first started volleyball, I broke my left wrist. I broke actually my radius, my ulna, and my growth plate...I was trying to catch myself from falling.
It just me being frustrated because when I mess up, I just get mad and I get an attitude... (Angie)

...then it was frustrating because I couldn't get the ball over sometimes. (Bridget)

...my eyesight is terrible... (Marie)

I know with me I struggle between choosing two different sports. Yeah, I think that’s with basketball and volleyball. I didn’t know which one I should play. I was at one point doing both and then I don’t know, I just said I just don’t want to do basketball anymore. (Tiffany)

Christal who previously shared that she is addicted to junk food, offered the following:

I mean I can kind of see a difference cause like when I first started AAU, I can jump and like jump real high...and now it's like I can still jump, but I can't jump like I used to. And I think that's the only thing that's stopping me.

Michelle shared that she feels uncomfortable when older men come to games and she wonders “who are you here for?” and she feels they are there looking at girls in their spandex.

**Strategies Utilized to Overcome Challenges and Barriers**

After discussing the challenges and perceived barriers to their participation in sport, girls were encouraged to think about the strategies, techniques, and support systems that have helped them continue their participation playing volleyball. Selective codes and axial codes that were revealed are listed in Tables 5 and 6 respectively. These themes included positive influence/support from others, exhibit persistence/determination, navigates image concerns, possess positive attitude/high levels of confidence, access to safe active neighborhood, and influential role models.
Table 5. *Strategies Utilized to Overcome Challenges and Barriers*

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<td>Exhibit persistence/determination</td>
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<td>Influential role models</td>
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Table 6. *Selective and Axial Codes: Strategies Utilized to Overcome Challenges and Barriers*

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<td>Supportive coach</td>
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<td>Exhibit Persistence/Determination (80 open codes)</td>
<td>Improve skills through continued practice and hard work</td>
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Table 6 (cont’d)

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</tr>
<tr>
<td>Mindset girls can do what boys do</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Resiliency with sticking with sport when challenged</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Navigates image concerns (60 open codes)</td>
<td>Able to overcome image concerns</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Negotiating uniform concerns</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Not worried about hair while participating</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Wear easy to manage styles while playing</td>
<td>26</td>
</tr>
<tr>
<td>Possess positive attitude/high levels of confidence (29 open codes)</td>
<td>Enjoyment/ Having fun</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Motivates herself/ Self talk</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Open to learning new sports</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Positive attitude/increased confidence</td>
<td>16</td>
</tr>
<tr>
<td>Other (27 open codes)</td>
<td>Future aspirations of receiving a college scholarship or going pro</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Time Management - balance friends and volleyball</td>
<td>2</td>
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<tr>
<td></td>
<td>Time Management - balance school and volleyball</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>No feelings of dropping out</td>
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</tr>
<tr>
<td></td>
<td>Physical Therapy</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Team meetings/team bonding</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sport becomes a big part of their lives/Love for the game</td>
<td>11</td>
</tr>
<tr>
<td>Access to safe active neighborhood (13 open codes)</td>
<td>Access to opportunities to be active in neighborhood</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Safe areas to be active in her neighborhood</td>
<td>4</td>
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<tr>
<td>Influential role models (11 open codes)</td>
<td>Exposure to female African American athletes as role models</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Exposure to female athletes as role models</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL OPEN CODES</td>
<td></td>
<td>305</td>
</tr>
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</table>
Positive Influence/Support from Others. Another theme that emerged from all of the focus groups was the positive influence and support girls receive from others including teachers, teammates, and particularly friends:

I vent to my friends too and they understand what I’m saying, but they’re like, “You just got to come back to practice, you’re not going to worry about her [her coach], just worry about your game cause you know how to play, you got potential so don’t worry about her.” So that’s what motivates me to keep coming back. (Kelli)

Girls provided examples of how their family provides support for them, especially when they have thoughts of quitting. Bridget’s friends and family provided her support when she was not confident in her skills. Keisha shared that if her parents were not there to encourage her to continue playing when she wanted to quit, she would have stopped playing:

Last year when I was playing AAU and I was playing on the 16 and under team and I was only 12 going on 13 ... And everybody was just skilled and the teams I played against it was hard. And like that used to bring me down cause I used to think I was doing bad and I wanted to quit that team that year but my mom and my daddy ain’t let me.

Support from family also came in the form of resources like transportation and finances:

My mom just drops everything she do to make sure I get to practice and get picked up. So there’s no issues there. (Kelli)

Now our car is broke down but we still call family members and use their car for a couple hours... (Keisha)

I’ve been blessed enough to where my parents have the money and I won’t need to reach out to somebody or go to a secondary source in order to play a sport. (Maya)

Along with receiving support from family members, girls also mentioned the support they receive from their coaches.

In ninth grade, AAU, I had a coach that was always on my back, always. Everything I did was either sloppy, too slow, not correct. And I mean now,
cause I went back to the team 11th grade year for AAU and now I understand why she was on my back. She came up to me, she told me why she was on my back so harsh. She said she saw potential, so she’s like, “I’mma work you” and now I see why. So I’m glad for her. (Tiffany)

**Exhibit Persistence/Determination.** All of the girls cited examples of how they exhibited persistence and determination that resulted in their continued participation in volleyball. The thought of quitting has crossed the mind of several girls but they usually exhibit persistence that keeps them going.

She [her coach] was not gonna let me quit because of some girls on the team and then, I mean, I couldn’t go on just knowing like, ‘Oh I quit because somebody didn’t like me.’ (Rosie)

Coaches, running, even when you didn’t do anything. Sometimes your teammates. It’s just a lot of stuff that’s just annoying that just makes you want to drop out and quit, but you can’t do it. I just keep pushing. (Kelli)

According to Michelle, even if participating is not fun, players have to keep going.

So, it’s like when that one person’s self-esteem go down, the whole team’s self-esteem goes down cause it’s like okay, we’re a team, we’re as one. So, it was like that’s not fun at all when everyone have an attitude on the court. So, it’s like get back in motion, and go out there, and play your heart out.

Even if she is not having fun, Keisha continues to play because it is going to pay off in the end and it is worth it. Tiffany, who started volleyball in the ninth grade, shared that even though it was challenging trying a new sport, she refused to be a quitter so she continued to stick with it. If Jennifer could not catch a ride with her teammates or coach, she would do her best to still get to practice:

I’d still try to struggle or find a way to get to where I got to be...if I have to catch three buses to get where I gotta go, I’ll catch three buses.

Six girls noted improvement in their skill levels through continued practice and hard work. When Tiffany felt doubt in her skills or saw other girls that can play really well, she
knew she had to work hard. Bridget also noted how she practiced harder and harder to improve her skills. Maya offered the following advice:

Sports are really awesome so you have an opportunity to get into sports, just try. If it’s your first time beginning if it’s your first time playing, then you don’t have to be that you don’t have to strive to be perfect cause nobody’s perfect, so just give it your all. 115% is all the coaches are asking. You don’t have to be good just try and if you put your hardest, if you try your hardest, then you will advance in playing and you will get better; so never give up. Strive to drive.

Girls were also creative in the ways in which they overcame financial barriers. In order to get the money for fees, Keisha fundraises with her team or she asks her family for assistance. When her family had limited funds, Michelle had to use her resources to stay active:

It’s certain things that you have to do outside of practice to make you a better player. So like going to camps was an issue when I was younger because it was only my mom. So it was like kind of hard because she was taking care of three of us. And it was like I had to use my resources, you know, around my neighborhood like running to [a certain marker] and back or using the track... it was an eye opener cause I was like you don’t have the privilege to do this or that, so it’s like you have to do what you gotta do and just do it by yourself for right now until things get better.

Many of the girls simply ignored negativity if it became a challenge. Maya said that when her friends compare her to others, she does not care because she is not like them, she’s an individual person. When her dad yells to her on the court during games, Brandi just zones him out so that she can concentrate and focus.

Even though the girls cited the influence of boys as a potential barrier, boys in general have not made it difficult for them to participate. Boys have not made it difficult for Michelle to participate because boys “can’t stop my grind because you want to holla at me or you want to hangout or do something”:
So it’s like if you stop what you’re doing just to see what he want, you miss out on opportunity. You missing out on time to practice and, you know, get your skills better.

Similarly, gender stereotyping has not made it difficult for most of the girls to participate. Rosie stated that girls can do what boys can do but “We can do it better”.

Navigates Image Concerns. All of the girls in each of the focus groups discussed how they navigate concerns about image. Negotiating uniform concerns emerged as a theme. Even though the shorts in volleyball are often times short, many of the girls have become used to them being short and tight. In fact, a few mentioned how the shorts made it easier for them to move:

I think little shorts like help you more. (Jennifer)

Yup. To move around. (Rosie)

Yeah, move around and everything because in basketball shorts you can’t really get down to...well you can but it’s a slow reaction. (Jennifer)

Another related theme emerged from the discussions regarding hair as a barrier to participation. Several girls stated that they do not really care about how their hair looks, they will play anyway.

I just don’t like when my hair gets puffy. (laughter) It is bad cause ... I look a mess. (laughter) But I still play, I don’t care at the end of the day. (Tonya)

In fact, participants believed if girls do not want to mess their hair up, they should not play.

Concerns participants had about their hair while participating in sport were negated by wearing easy to manage styles while playing.

A long time ago I used to get my hair done like every two weeks. I used to sometimes miss my practice because I got my hair done (laughter) but eventually I just start to ... it was going to get messed up anyway so I just get a weave and just call it a day and put a headband on, keep it in a ponytail. (Kelli)
... if you have weave or something, you just had a hard day of practice, I can just put it in a pony tail and go about my day. (Christal)

The girls shared a variety of easy to manage styles that can be worn while participating in sport and physical activity including braids, ponytails, buns, weave, or pulled back with a headband.

**Possess Positive Attitude/High Levels of Confidence.** Eleven girls explained the importance of having a positive attitude and high levels of confidence. Many of the girls talked about how they motivate themselves to keep going:

I talk to myself. That’s my way of focusing on me, focusing on what I’m doing, not worrying about my mistakes, just clear my mind. (Tiffany).

What makes me want to stop or quit volleyball is when I start messing up sometimes or when a coach yells at me, but I don’t really quit. I just think I want to quit, but I’m not a quitter. I just keep motivating myself, keep going and realizing I am pretty good at this. (Tonya)

When we go to different tournaments and you see other girls who like are way, way better, it’s like “Oh they’re good. What am I? What am I doing?” (laughter) So, I just keep motivating myself to be one day like them or better than them, so I’ll just keep going. (Kelli)

Several girls try to be positive on the court.

...I just tell the team, “Okay, we can do this” “Just get it next time,” or “Hustle more”. So, positive things that you could tell others. (Michelle)

Ah, at first I couldn’t get my overhead serve and coaches just kept trying to tell me and I’m not getting it but I finally got it. You just have to practice. Like if, you practice, then when it’s game time, you’ll be more confident in your playing and you won’t be as nervous. (Maya)

...just me being frustrated because when I mess up, I just get mad and I get an attitude, but then I just get out of that and I just keep playing. (Angie)

**Access to Safe Active Neighborhood.** Marie, Brandi, and Tonya shared that they feel there are safe areas to be active in their neighborhood.
My neighborhood it’s not strict, but they enforce rules like you have to recycle, you have to keep your grass cut, and if it gets taller than the regular amount, they’ll ticket you. It can be safe. (Marie)

Well, I live in a suburb so it’s pretty much everything, parks, recreational centers, and tracks. The high schools tracks are open to the public, so I could go about anywhere. (Brandi)

They have volleyball, sand volleyball, they have tennis and they have a pool and a baseball field. (Tonya)

**Influential Role Models.** Eight participants noted the importance of having influential role models. Over half of the girls noted the importance of being exposed to female African American athletes as role models. Maya shared that there were several African American girls on the Olympics team that played the positions of outside hitter and setter. She looked up to one player in particular on the team because her hits were “awesome”. When Marie sees African American players in the Olympics playing, it makes her think if they can do it, she can do it too:

Sometimes the media can like not make me want to quit but make me think why do they think that only Caucasian people play. Because there are a lot of African Americans but you don’t really get to see a lot of African Americans in college but the Olympics you see 2 or 3 African American players and that kinda like make [me] think if they can do it, I can do it. It’s like pushing me more to know that they are actually doing it.

**Other.** Additional strategies for overcoming potential barriers to participation emerged from the focus group discussions. While these responses were not cited as much as the ones that have been previously mentioned, they were important to the participants that mentioned them. These additional strategies included having team meetings and team bonding experiences, physical therapy to overcome injuries, being able to balance friends, academics, and volleyball, and the potential to earn scholarships and possibly play at the
professional level. Kelli shared her goal of obtaining a scholarship and possibly playing professionally.

...in the end I just motivate myself to keep going and I can get scholarship off of this. And maybe play a professional league if I like really keep trying. (Kelli)

Several participants were able to overcome the difficulties many athletes have in balancing school and athletics.

My daddy made me study more cause I didn't like to do my homework. So before I went to practice, I went home, and they made me do my homework then brought me back up to school for the practice. And that's when my grades got better. (Christal)

I also think if you want the grade you'll get the grade, that's how I see it. If I want the A I’m going to get the A. So I feel like you gotta know how to set practice aside from school. So you gotta, I guess, discipline your mind and focus on what’s important. (Tiffany)

It was evident that for all of the participants, sports became a big part of their lives and their love for the game was expressed in the discussions.

Yeah if I couldn’t do anything else, I would want to play volleyball first. (Rosie)

I feel like scholarships are first. It’s always going to be parties, but you never know who’s going to be at this tournament. Scouts could be at this tournament...I feel that volleyball is my main priority, so that comes first. (Kelli)

...volleyball is getting somewhere, and instead of like hanging out, it’s something that you’re doing that's positive, but hanging out and getting in trouble is not getting you nowhere. (Keisha)

Components of Quality Sports Programs

Finally, girls were asked questions to generate ideas for programs that would encourage other girls to participate in sport and physical activity and continue their participation. Enhance accessibility by providing resources, quality coaching, athlete -
friendly program structure, and skill development emerged as selective codes and are outlined in Table 7. Further detail is presented in Table 8 which displays the breakdown of axial codes and number of open codes for each axial code.

Table 7. Components of quality sports programs

<table>
<thead>
<tr>
<th>Selective Codes</th>
<th>Number of Open Codes</th>
<th>Number of Participants Identifying Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance accessibility by providing resources</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Quality coaching</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Athlete - friendly program structure</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Skill development</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8. Selective and Axial Codes: Components of quality sports programs

<table>
<thead>
<tr>
<th>Selective Codes</th>
<th>Axial Codes</th>
<th>Number of Open Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance accessibility by providing resources (14 open codes)</td>
<td>Provide financial assistance or offer free programming</td>
<td>12</td>
</tr>
<tr>
<td>Quality Coaching (13 open codes)</td>
<td>Provide transportation to aid in participation</td>
<td>2</td>
</tr>
<tr>
<td>Athlete - Friendly Program Structure (11 open codes)</td>
<td>Encourage a positive coach/athlete relationship</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Have knowledgeable coaches that demonstrate positive coaching behaviors</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Academic/life skills component</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Balanced/ adequate playing time</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Get feedback from girls regarding barriers to participation</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 8 (cont’d)

<table>
<thead>
<tr>
<th>Selective Codes</th>
<th>Axial Codes</th>
<th>Number of Open Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce girls to role models</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Make programming fun</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Offer prizes/rewards</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Provide a variety of activities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Skill Development (4 open codes)</td>
<td>Provide support for beginner players</td>
<td>2</td>
</tr>
<tr>
<td>Focus on skill development</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TOTAL OPEN CODES</td>
<td>42</td>
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</tr>
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</table>

**Enhance Accessibility by Providing Resources.** Several girls cited the importance of a program to enhance accessibility for girls by providing resources in the form of financial assistance and free programming as well as transportation to aid in participation.

For me it’s probably just the financial ways and the support from your family because it’s a lot of people like girls in [city] that are probably wanting to do sports but they barely have a house to live in. So just seeing them, that they could be doing something or going somewhere and they don’t have the proper stuff to do it. (Keisha)

There should be a specific AAU team where the fee is free. They just have to get sponsors. (Bridget)

Fundraisers, so if they didn’t have the money you fundraise. (Rosie)

And far as like cause they will just drop out if they don’t think they’re good, I’d get to know a person and basically help them and I’ll pay for them to get into camps cause I don’t want them to drop out. (Christal)

**Quality Coaching.** Half of the participants (n=7) highlighted quality coaching as a component of a quality sports/physical activity program they would incorporate if they had an opportunity to develop a program. Girls noted that programs should have knowledgeable coaches that demonstrate positive coaching behaviors.
I’d probably invest in people that motivate you to do, to try your best like, don’t give up just because you can’t pass the ball or get it to the setter. (Jennifer)

So you have to make sure you’re not rude, you have respect for the players, that you talk to them like you would want to be talked to. (Maya)

These ideas were confirmed by Angie who shared the following.

...as a coach you should just make them [players] feel good...I know you want to win, but most of the time you just got to work with that one.

Michelle added that programs should encourage a positive coach/athlete relationship.

..it’s like when you really get to know a person they will be comfortable enough to let out more and then you can basically help them like one-on-one training.

**Athlete - Friendly Program Structure.** Most of the girls (n=10) mentioned the need for a program structure that is athlete-friendly. An athlete-friendly program structure would include an academic and life skills component. Michelle would include optional counseling and tutoring in her program to help players feel comfortable enough to seek help. Academics would be a big part of Christal’s organization because she feels a lot of people drop out of sports because of their grades. She says “I would focus on grades and then sports.”

Another component mentioned by girls was balanced/adequate playing time.

According to one player:

And also you shouldn’t bench every player. Like every player deserves to have playing time cause they’re devoting their time to be on your team. Even if they’re not as good as the other teammates, at least give them a chance. (Maya).

Rosie offered introducing girls to role models to encourage participation.

Show them the story of like how someone like them didn’t want to play or something and then they found out they was (sic) good and now they on top doing their best.
Additional ideas included making programming fun, offering prizes/rewards, and providing a variety of activities as well as getting feedback from girls regarding barriers to participation so that strategies can be implemented to get more girls involved.

**Skill Development.** Several of the participants talked about the importance of a program focusing on skill development with a few noting the importance of providing needed support particularly for beginner players that are new to the game.

My program would like also include skills training...things that could build up their confidence and get them out there to like actually want to learn instead of just somebody forcing them to come cause they have nothing else to do. (Marie)

**Summary**

The results of the focus group discussions highlighted the sport experiences of adolescent African American girls as well as their ideas for engaging inactive girls in sport and physical activity. The girls in this study identified a number of challenges and perceived barriers that have made participation in sport and physical activity difficult including concerns regarding image, identity-related issues, criticism from significant others, resources and access limitations, lack of skills and ability, negative influence of coaches, challenging aspects of sport participation, limited social support, and balancing time demands. Despite this, results suggest that while girls are faced with a number of challenges and perceived barriers to their participation, they are able to implement strategies and techniques like exhibiting persistence and determination, navigating image concerns, possessing a positive attitude and high levels of confidence, having access to safe active neighborhoods, and influential role models to navigate their participation in sport and physical activity. They also have systems in place in the form of parents, peers, and coaches that support them. Findings also revealed that if girls had the opportunity to
develop a program for inactive girls, the components their program would include are enhancing accessibility by providing resources, quality coaching, an athlete-friendly program structure, and skill development.

The next chapter will discuss themes that emerged from analysis and take a closer look at how interpersonal, intrapersonal, environmental, and socio-cultural factors have influenced girls’ sport and physical activity experiences.
CHAPTER 5

DISCUSSION

Introduction

This study explored the challenges and perceived barriers active African American adolescent girls experience as they navigate their participation in sport and physical activity as well as the strategies and support systems they have in place that keep them participating. Felton et al. (2002) and Kimm et al. (2002) explained that African American adolescent females report a larger decrease in their level of physical activity as they progress through adolescence when compared to boys and girls of other ethnic groups. Thus, it was important to identify factors that influence their participation in sport and physical activity. The ultimate goal of this study was to determine how a group of active African American adolescent girls have been able to defy this statistic and survive in sport. Figures 2 and 3 are modified versions of the social ecological model previously presented for this study and illustrate how findings support the social ecological models for challenges and strategies experienced and reported by participants. The results of this study also provide recommendations for future program development.
Figure 2. Summary of findings supporting social ecological model – Challenges.

- Intrapersonal
  - Lack of skills and ability
  - Challenging aspects of sport participation
- Interpersonal
  - Criticism from significant others
  - Negative influence of coaches
  - Limited social support
- Environmental
  - Resources/access limitations
- Socio-cultural
  - Concerns regarding image
  - Identity-related issues

Figure 3. Summary of findings supporting social ecological model – Strategies.

- Intrapersonal
  - Exhibit persistence/determination
  - Possess positive attitude/high levels of confidence
- Interpersonal
  - Positive influence/support from others
  - Influential role models
- Environmental
  - Access to safe active neighborhood
- Socio-cultural
  - Navigates image concerns
Bronfenbrenner’s Ecological Systems Theory (1979) provided the contextual framework for developing the questions as well as forming the analysis and interpretation of intrapersonal, interpersonal, environmental, and socio-cultural factors that affect adolescent girls’ participation in sport and physical activity. These levels of influence have been shown to be important contributors to explaining physical activity behavior (Sallis et al., 2008; Spence & Lee, 2003). Within each of these categories, a number of challenges and barriers as well as strategies and support systems were identified in the focus group discussions. Using a social ecological approach in this study allowed the exploration of the integration of these factors to identify components that would be necessary to facilitate sport and physical activity participation among this population.

**Intrapersonal Factors**

Intrapersonal factors are the first level of the conceptual model and include personal and psychological factors like attitudes, beliefs, and behaviors that are unique to each individual. Participants in this study identified a number of intrapersonal factors that influenced their sport participation, including balancing time demands, challenging aspects of sport participation and lack of sport skills and ability. Girls talked about how difficult it was for them to balance their time between playing volleyball and other tasks such as maintaining academics and spending time with friends. While girls have reported being unable to handle this balance (Boyington, Carter-Edwards, Piehl, Hutson, Langdon, & McManus, 2008; Dwyer et al., 2006; Robbins et al., 2003; Slater & Tiggemann, 2010; Taylor et al., 1999), sport provided an opportunity to practice the life skill of time management that will be valuable to girls as they can transfer this skill to other areas of their lives.
Girls also identified a number of challenging aspects of sport participation that included not having fun, having a lack of motivation, conditioning, and not getting enough playing time, which correlates with findings from previous research (Robbins et al., 2003; Whitehead & Biddle, 2008). Not having fun was often attributed to teammates having poor attitudes and not supporting each other on the court. Only three participants found conditioning to be a challenge while lack of motivation was offered as a possible reason for inactive girls to drop out of sport although none of the active girls in this study experienced lack of motivation.

All of the girls expressed lack of sport skills and ability as a challenge to their participation. Many reflected on the time when they first started to learn the game of volleyball and they lacked the knowledge and the skills necessary to be successful. This led to a lack of confidence that threatened their continued participation in the sport. These results reinforced the findings of previous studies that show girls reporting being self-conscious about their limited sport skills, often times leading to drop out (Allender et al., 2006; Dwyer et al., 2006; Slater & Tiggemann, 2010; Yungblut et al., 2012). While many of the girls spoke of having a lack of confidence in their skills and abilities, particularly when they started to learn the sport of volleyball, they were able to improve their skills through continued practice and hard work. Maya offered the following for girls considering starting a sport: “Girls don’t have to be good, they just need to try their hardest then they will advance in playing and will get better”.

Girls will not participate in sport if they do not have competence so it is important for coaches to help girls develop competence in their skills. It may be necessary to encourage participation among girls in sport and physical activity at earlier ages like
elementary school. Many of the girls in this study did not begin participation in volleyball until middle school. Tiffany in particular expressed that her lack of confidence in her volleyball skills was due to the fact that she did not start the sport until she started high school. It is also suggested that programs employ coaches that are able to effectively teach the fundamentals of the activity and are able to encourage girls as they experience improvement. As girls feel more competent in their skill levels, they will experience an increase in their confidence, which leads to continued motivation and participation.

Despite the intrapersonal challenges girls faced, they were able to negotiate past these barriers by exhibiting persistence and determination. The sentiment that was shared by many of the girls was “I’m not a quitter”. The persistence girls showed came in many forms including continuing to practice a skill even if it meant repeating that skill the entire practice. Even when girls felt challenged, they kept going because they did not want to let their team down or they were determined to get better.

It was also found that it was important that girls possess a positive attitude and had high levels of confidence in order to overcome challenges and be successful in their sport. This was made possible for some girls through motivating themselves and engaging in self-talk. To keep her head in the game or during practice, Tiffany talked to herself, which helped her focus on her, what she was doing, not worry about her mistakes, and just clear her mind. Self-talk is one of many psychological skills training tools that can be implemented with girls to overcome the mental aspect of participation that may lead to dropout. Psychological skills training has been shown to be effective with young athletes (e.g., Fournier, Calmels, Durand-Bush, & Salmela, 2005) and has been recommended to
coaches for program implementation (e.g. Camire & Trudel, 2013; Gould, Damarjian, Medbery, 1999).

**Interpersonal Factors**

Interpersonal factors are the second level of the conceptual model and shape the behavior of adolescents through significant others such as the influences of peers and family members, teachers, and coaches through social support and role modeling. Interpersonal challenges revealed in this study included criticism from significant others, limited social support, and the negative influence of coaches.

The critical support girls reported came from parents and teammates. Many of the girls shared stories of how their parents tried to coach them while they are playing or yell at them when they make mistakes. Several players experienced teammates that were mean to them, particularly when they started in the sport. In other cases, teammates were either not serious enough or had poor attitudes which caused several girls to consider not coming back because it brings the rest of the team down. In fact, Jennifer left her team because the other girls were not serious and were unproductive and she did not want to waste her time.

Limited social support emerged as another challenge to girls’ participation. Girls discussed the lack of support they received from peers, teachers, family, and non-sport friends. A few girls spoke of the activities of their siblings having priority over their participation in sport. To deal with the limited social support, girls spoke about their ability to ignore negativity that comes from friends, parents, and siblings. Angie offered the following advice for other girls: “If girls are into a sport and other people say they aren’t going to be good, they should keep doing what they feel they want to do”.

93
Ignoring negativity also included ignoring the influence of boys which was identified as a barrier. Boys in general had not made it difficult for most of the girls in this study to participate, unlike other research which found that girls were often teased by boys which led them to being uncomfortable (Boyington et al., 2008; Dwyer et al., 2006; Slater & Tiggemann, 2010; Vu et al., 2006). Kelli shared that even though there may be boys in the gym where she practices, she just ignores them. It may be important for coaches and the parents of boys to teach boys to be more accepting of girls as athletes.

Although family members can be critical of the participants at times, they also provide an overwhelming amount of support that encourages girls to continue their participation in sport (Mabry et al., 2003; Ries et al., 2008). Parents are major influences on the participation of girls (Biddle et al., 2005; Dwyer et al., 2006; Slater & Tiggemann, 2010; Whitehead & Biddle, 2008). The attitude parents have toward physical activity plays a critical role in the attitude of their daughters toward physical activity (Thompson, 2011). In many cases, parents provided the financial support to participate in AAU volleyball clubs which can at times be expensive. Several shared that when they had thoughts of quitting, their parents would not let them. Family support and encouragement was a valuable influence on the continued participation of girls, particularly when their parents were also active. Parents that are encouraging and supportive of their daughter’s participation will result in greater enjoyment, higher levels of perceived competence, and a greater chance at continued participation. A few girls received support from the parents of other players. When Jennifer’s mom started working again, she had to get rides from other girls, which was extremely valuable when she played for an AAU club that was a ways away from where she lived.
Support also came from friends. As shown in previous research, friends are also major influences on the participation of girls (Dwyer et al., 2006; Slater & Tiggemann, 2010). Friends offer support and encouragement, do not judge and provide a sense of comfort (Yungblut et al., 2012). Many of the girls’ closest friends were their teammates. It did not always start out this way but after spending so much time playing volleyball, non-sport friends began to fall away and they became closer to their teammates because they could relate to each other and they “make the game fun, make it exciting, uplifting and competitive”. They also provided support and motivation when girls had thoughts of dropping out.

Even though exposure to female African American athletes as role models was not high, girls did identify a few influential role models that have encouraged them to continue their participation in sport. Several girls mentioned watching the U.S. Women’s Volleyball team play on television during the 2012 Summer Olympics. There were several African Americans that played on that team. Marie stated that when she saw African American players in the Olympics playing, it made her think if they can do it, she can do it too and that pushed her.

In addition to parents, coaches are also sources of positive youth development in sport and physical activity contexts (Weiss & Wiese-Bjornstal, 2009). Coaches were found to provide the necessary support for girls to continue participating in sport. Coaches provided valuable feedback on skills and pushed girls because they knew they can do better and saw potential in them. Girls understood that sometimes coaches had to be tough on them because it was for the betterment of their game. Like parents, coaches also
would not let girls quit when things became challenging and helped to provide transportation and financial support through fundraisers.

Despite the positive role coaches play, the findings around the negative influence of coaches were particularly interesting. Negative experiences with coaches have been shown to discourage girls from participation (Gyurcsik, Spink, Bray, Chad, & Kwan, 2006; Mabry et al., 2003; Slater & Tiggemann, 2010). Based on all of the focus group discussions, the negative influence of coaches was prevalent among a majority of the girls. Several girls reported having a coach during some point of their time playing volleyball that made them want to drop out. Some coaches were rude and hurt players’ feelings (often thought to be on purpose) while others showed what the girls believed to be blatant favoritism for certain players. This favoritism often led to a lack of playing time which caused girls to dislike their coach. Coaches that have a lack of knowledge about the game or simply “cannot coach” were easily identified by girls because of unproductive and unorganized practices and the lack of focus on skill development. Many coaches did a lot of yelling in order to get their point across and that was a turn off for many of the girls. These findings supported the need for programs to require their coaches and volunteers to participate in coaches’ education training that teaches coaches not only how to develop the physical skills of girls, but also how to create a positive mastery climate that promotes the development of life skills as well.

**Environmental Factors**

Bronfenbrenner (1979) also identified environmental factors (e.g., schools, neighborhoods, and community/recreation centers) which are community and environmental influences within an individual’s environment that impact participation.
Environmental factors that influenced participation among this population included neighborhood safety and accessibility to facilities/programs.

Participants in this study reported numerous environmental barriers that have been found to be consistent with other research studies (Boyington et al., 2008, Dwyer et al., 2006; Gyurcsik et al., 2006, Halyk, Brittain, Dinger, Taylor, & Shephard, 2010; Ries et al., 2008; Slater & Tiggemann, 2010). Resources and access limitations included the cost of programs, issues with neighborhood safety, lack of transportation to programs and limited community resources for participating in sport and physical activity. In many of their neighborhoods, there were not enough places to be active and the girls had to drive miles to find a recreation center or sport programs, which led to transportation issues for some girls.

Participating in AAU volleyball club programs can be a costly endeavor that made it difficult for many girls to participate in volleyball beyond their high school programs. One of the participants in a study conducted by Bruening (2004) with African American female athletes shared the difficulties of playing for a “good” club volleyball team:

If you don’t have $5000 per year just for volleyball then you are going to play for a lesser club. That club is not as well known and makes it harder for you to get seen by colleges. Your level of training is going to go down.

While the local AAU volleyball clubs these girls participate in do not cost $5000, they can still be cost prohibitive, causing families to be creative in raising money for their daughters to participate and receive extra skills training.

It was not the majority but a few of the girls reported having access to opportunities to be active in their neighborhood. In the neighborhood where Tonya lives, there was a recreation center available to her where they have volleyball, sand volleyball, tennis, a pool
and a baseball field. Marie, Brandi, and Tonya shared that they feel there are safe areas to be active in their neighborhood. This may be explained by the fact that Marie and Brandi both live in suburban areas while Tonya lives in a well-known tight knit community within city limits.

Additional opportunities have diminished for girls’ participation in sport and physical activity due to the elimination of physical education programs as a result of school budget cuts which more often affects girls in urban communities. The inclusion of physical education classes as well as school-based physical activity programs is crucial to the increased levels of participation of girls (Gordon-Larsen et al., 2000), particularly for those that do not have the transportation or financial resources to partake in programs outside of school.

**Socio-cultural Factors**

Lastly, socio-cultural factors are macro-level factors that include cultural and social norms that may be direct or indirect influences (Bronfenbrenner, 1979). Girls identified a number of socio-cultural barriers previously identified in research including concerns regarding image as well as identity-related issues (Allender et al., 2006; Boyington et al., 2008; Dwyer et al., 2006; Robbins et al., 2003; Slater & Tiggemann, 2010; Taylor et al., 1999; Vu et al., 2006, Whitehead & Biddle, 2008).

Body image concerns, uniform concerns, concerns about not having the “right” body type as well as concerns about portraying a “girly” image and difficulties managing hair were identified by a majority of the girls during the focus group conversations. While it was not expressed by a majority of girls, not having the “right” body type did emerge as an axial code. A few girls shared that they considered themselves to be too tall, too short, too
skinny or too “thick” to play volleyball but it was observed that in almost every case, these feelings developed from the feedback of others including friends and family. Several studies have shown that African American girls tend to have more tolerant attitudes towards their body size compared to other adolescent girls (Alleyne & Lapoint, 2004; Boyington et al., 2008; Hesse-Biber et al., 2004). African American girls who are a little overweight are often identified as “thick”, “healthy” or “big boned” and are often considered to be an ideal body type in the Black community which does not coincide with society’s dominant standards of beauty.

Body image concerns identified by girls in this study were closely tied to uniform concerns. When girls did have insecurities about their bodies, it was usually because of the volleyball uniform which requires girls to wear short spandex shorts. Girls described the shorts as very tight and short and they felt “exposed”. Many of the girls wore longer shorts in middle school so they were uncomfortable wearing the short spandex once they got to high school which explained by Tonya “was bad”. An additional concern with the shorts was that they caused wedgies which can be very uncomfortable and embarrassing when they have to constantly tug and pull on their shorts. This means that while girls may be comfortable with their bodies in other settings, in a volleyball setting, they are worried about how they look and what others think about them. This can result in conflict in how girls view themselves. Future research can focus on further exploring the dissonance girls experience and how to address it.

Despite the previously mentioned challenges, all of the girls were able to navigate their image concerns to continue their participation. Most of the girls had initial reservations about the spandex uniforms shorts but they were able to overcome being
uncomfortable and became used to wearing them because they still wanted to play volleyball.

Concerns about body image extended to hair concerns for many of the participants which are also tied to racial identity among African American girls. Hair care issues have been found to directly affect exercise practices, particularly among African American females. Adding moisture to the hair (i.e., sweat from exercising) reverts the texture of the hair from relaxed or straight to a tight curl. Hall et al. (2013) found that almost 40% of the African American women surveyed in their study often avoided exercise because of hair concerns including sweating out their hair or having to restyle their hair. African American women tend to avoid exercise and sweating because hair management can be costly and time consuming (Railey, 2000).

Most recently, even though Gabrielle (Gabby) Douglas became the first African American gymnast in Olympic history to win the individual all-around gold medal during the 2012 Summer Games, she was scrutinized for her “unkempt” hair while competing. Print and social media outlets focused on the state of Gabby's hair rather than her historic accomplishments leading to discussions and narratives about hair as a standard of beauty, particularly among African women, and its relation to the social construction of race and gender (Carter – Francique, under review, 2014). These types of media representations about African American women, their hair, and their participation in sport can contribute to the low levels of girls’ sport participation.

All of the girls described difficulties they have had managing their hair while also participating in sport. Several of the participants in this study explained that they have missed practice because they do not want to mess up a freshly done hairstyle. One went so
far as to tell her coach that her stomach hurt so she would not have to play in a game and sweat out her hair. Sweating while being active is a challenge for girls because it can be difficult to maintain a hairstyle for an extended period of time.

However, while hair has been identified as a major barrier to physical activity among African American women and girls, the girls in this study were generally not worried about how their hair looked while participating. Christal offered the following: “If you really like the sport, you’re going to mess your hair up for the sport, and if you don’t like it, then don’t play.” Girls were able to overcome this barrier by wearing easy to manage styles while they were playing. Several hairstyle options were suggested including braids, ponytails, weaves, buns and using headbands to manage hair while participating in sport and physical activity. These options are similar to research that reported that styles that African American women considered to accommodate exercise included ponytails, braids, cornrows, and natural styles (Hall et al., 2013). These styles were identified as convenient and able to withstand sweat.

Additional socio-cultural factors included identity issues related to race and gender. As shown in previous research, girls in the present study experienced challenges with boys making negative comments about their participation (Dwyer et al., 2006; Slater & Tiggemann, 2010; Vu et al., 2006), as well as the influence of stereotypes on female sport participation (Dwyer et al., 2006; Grieser et al., Mabry et al., 2003; Slater & Tiggemann, 2010; Vu et al., 2006; Whitehead & Biddle, 2008). Fears of being considered too masculine or identified as a tomboy or lesbian did not emerge in this particular study but has been identified as a barrier to participation among adolescent girls in previous research (Allender et al., 2006; Dwyer et al., 2006; Mabry et al., 2003; Vu et al., 2006).
A lack of exposure to female African American athletes as role models emerged as well. As previously stated, girls in this study did identify a few influential role models that have encouraged them to continue their participation in sport; however, many of the girls felt there were not enough African American females that they can look to as examples of active role models, especially in the sport of volleyball. It has been shown that there is limited coverage of African American female athletes in the media (Bruening, 2005; Cooky, Messner, & Hextrum, 2013) and this “limited coverage and representation of African American females leave limited examples and role models for African American girls and women in sport” (Carter – Francique, under review, 2014).

**Components of Quality Sports Programs**

When girls were asked questions to generate ideas for programs that would encourage other girls to participate in sport and physical activity and continue their participation, enhancing accessibility by providing resources, providing quality coaching, having an athlete-friendly program structure, and focusing on skill development emerged as necessary program components.

In instances where girls in the present study may have faced financial challenges, volleyball was important enough for them to find ways to pay for programs by doing fundraisers with the team or asking extended family for assistance. However, participants realized that not all girls are able to overcome financial challenges and reported a need for programs to provide resources to enhance accessibility. Ideas discussed included offering financial assistance in the form of grants or fundraisers and offering free programs. Most of the girls also identified quality coaching as a component of a quality sports and physical
activity program citing the importance of having knowledgeable coaches that demonstrate positive coaching behaviors and encourage a positive coach/athlete relationship.

Another component of a quality sports program identified by the girls is an athlete-friendly program structure that would include an academic and life skills component, offer balanced/adequate playing time, and introduce girls to role models. Additional ideas included making programming fun, offering prizes/rewards, and providing a variety of activities as well as getting feedback from girls regarding barriers to participation so that strategies can be implemented to get more girls involved. Lastly, participants talked about the importance of a program focusing on skill development, particularly providing needed support for beginner players that are new to the game.

The program characteristics identified by girls in this study are consistent with other research that identifies characteristics of effective youth development programs that enhance physical activity motivation and contribute to positive physical, psychological and social development of girls (Lerner, Fisher & Weinberg, 2000; Petipas, Cornelius, Van Raalte, & Jones 2005; Stuntz & Weiss, 2010; Weise-Bjornstal & LaVoi, 2007). Emphasizing these components in programming will not only encourage inactive girls to participate in sport and physical activity but possibly keep them involved for an extended period of time, as well as lead to positive psychosocial outcomes.

Summary

Girls’ experiences were consistent with the social ecological framework presented in this study that explains that there are multiple levels of influence that interact to impact physical activity behavior and are found to lie within integrated intrapersonal, interpersonal, environmental, and sociocultural systems. Interactions within these
networks have shaped their participation experiences and include the influences their personal values, family, peers, community, school, culture, and social norms.

The analysis of the participants’ experiences show that factors within different systems can not only independently influence behavior but it may be the simultaneous interactions between systems that led to the continued motivation to not only begin participation in sport and physical activity but also maintain that participation from elementary through high school. For example, the negative influence of limited social support (interpersonal) experienced by some girls could potentially be alleviated by sport and physical activity opportunities in the school environment (environmental). It may not be enough to live in a community that has access to quality recreation facilities or to have the financial resources to participate in quality programming to get girls motivated to participate. In order to create an environment that facilitates sport and physical activity participation among girls, it is important that girls are experiencing support from more than one level in the model. While influences from multiple levels played a significant part in not only explaining girl's participation in sport but their continued participation as well, it is important to note that it does not seem that influences from all levels of the model are necessary to exist to initiate and continue sport and physical activity participation.

For this group of participants, strategies and support systems on each level of the model had a greater influence on levels of participation than challenges and barriers, which may explain why this group of girls was able to overcome the barriers that cause many other African American adolescent girls to not participate in physical activity or drop out. Two of the strongest strategies that seemed to contribute to the survival in sport among the girls within this study and other girls that choose to not participate was the support
The personal values that the girls expressed along with their continued motivation to participate in volleyball seemed to limit the negative influence of sociocultural factors, particularly body image issues. Girls were able to adjust to the uncomfortable volleyball uniform they wear that they described as too short and too tight. They were also able to overcome concerns about sweating out their hairstyles while participating in sport. While many adjusted by wearing manageable hairstyles, others knew that having messy hair was a possible outcome but did not care what others felt about their hair. The girls in this study possessed a level of persistence and continued motivation which proved to be a strong motivator for their continued participation. This motivation as well as their love for the game of volleyball seemed to assist in overcoming barriers that have been identified by inactive girls.

While it helped for girls to have a level of persistence and intrinsic motivation to influence initial and continued participation, the influence of interpersonal support systems in the form of family, coaches, and teammates was a major contributor in shaping participation decisions. Most of the girls exhibited an intrinsic motivation to continue their participation even when they were faced with insecurities about their skills, about the way they looked (sweaty and not “girly”), or about the uniform they had to wear. However, when they were close to giving in to these insecurities, they had support systems that encouraged them to keep going. In fact, in a few cases, parents did not allow their daughters to quit even if they wanted to.
The encouragement and support girls receive from their families, coaches and peers may be enough to overcome the barrier of the lack of facilities within their neighborhood or concerns about neighborhood safety. The girls in this study seemed to particularly rely on parental support to be able to navigate through the physical environmental barriers. If programs were outside of the neighborhood, girls had to rely on their parents, and in some cases their coach, to provide transportation to programs. Similarly, while programs that are costly pose a barrier for some girls, many of these girls relied on their parents to provide the financial resources. When teams engage in fundraising efforts, parents are often active in raising money for their daughter’s continued participation. One of the participants that lived in the suburbs discussed how at one point her family’s car broke down. Instead of accepting that she would not be able to get to practice until the car was fixed, she asked for assistance from other family members and sometimes relied on her coach to get her to and from practice. Similarly, when families encountered financial restraints, they either sacrificed in other areas (one year Tonya received her Christmas gifts late) or they were active participants in raising money to pay for program fees.

The findings from this study suggest that without the interpersonal support of parents or coaches or the intrapersonal persistence and continued motivation the girls within this study possessed, other African American adolescent girls may still be at risk for barriers limiting their participation. The success of this group of girls highlights the possibility for other African American girls to not only be active participants in sport and physical activity but also enjoy it. This success can be replicated among other girls if they are provided with the appropriate support to reduce the barriers they experience.
This study has also provided the support for using an ecological approach to better understand the complex relationships and influences of African American adolescent girls on their continued sport and physical activity participation. Professionals that work with adolescents need to have an understanding of the relationships among the personal, social, cultural, and environmental factors girls experience and use this knowledge in designing and implementing interventions that will best serve this population. Interventions and quality programming that consider incorporating a multi-level ecological framework in the program design are needed to encourage girls to participate in sport and physical activity to experience the benefits of regular physical activity and to establish healthy behaviors.

**Limitations**

The number of girls that participated in this study was 13 and the length of the four interviews was between 50-75 minutes, making the data collected useful for gaining a level of depth on the subject. When conducting qualitative studies with small sample sizes, it is not possible to generalize the findings to other groups (Glaser & Strauss, 1967). This limits the generalizability of the study findings to larger populations of adolescent girls and girls of other cultures. The rich and detailed findings are specific to the participants in this study and may not be representative of all African American adolescent girls. However, findings from this study can be useful in guiding future research as well as informing practitioners in the designing of sport and physical activity programs for girls that encourage them to be physically active.

The sample of African American adolescent females in this study was limited to one underserved urban community. Findings may not speak to girls from other racial or ethnic backgrounds or girls from different geographic areas. All of the girls in the study are
current AAU volleyball players which may not reflect any differences in participants of other sports or other sport programs (recreational, school, etc.). The perspectives of girls that are physically active but do not participate in any organized programming are also not reflected in this study.

In using focus groups as the selected methodology, there was the potential for the girls to provide socially desirable responses rather than give accurate descriptions of their perceptions on the subject. Using focus groups as a methodology poses the possibility that adolescent participant responses may be influenced by power imbalances with the adult conducting the focus group or participants that dominate discussions (Liamputtong, 2011). Girls that are not as outspoken may be hesitant to discuss their perceptions with the group if these power imbalances exist. However, while facilitating the discussion, the moderator made every effort to reduce any power imbalances by encouraging group participation, engaging quieter group members and making sure every participant was heard. Other researchers have successfully conducted similar research using focus groups as a methodology (Dwyer et al., 2006, Vu et al., 2006, Whitehead & Biddle, 2008).

Lastly, conducting additional individual interviews as well as descriptive field notes while girls participated in the summer volleyball program would have allowed further clarification of the study’s findings as well as triangulation of the data, enhancing the trustworthiness of the study. Individual interviews may have also provided an opportunity for girls that were less vocal or wanted to expand to share additional ideas. Considering the limitations identified, the results analyzed and reported should be interpreted with these limitations in mind.
Implications for Program Development

As previously shown, a significant amount of African American adolescent girls do not meet the recommended levels of physical activity. These low rates of participation among this population is concerning and it is important for practitioners to be able to engage girls in sport and physical activity programming while working to also sustain their participation through varied opportunities. Physical activity motives include perceived competence, social acceptance and support as well as fun and enjoyment (Stuntz & Weiss, 2010; Weiss, 2000) and are important considerations in program development.

The suggestions offered by the participants of this study have implications on those with the responsibility of providing quality sport and physical activity programming for adolescent girls. Many programs need to be restructured to engage inactive girls and encourage their continued participation. Program directors have been found to use a variety of strategies to get girls involved in sports including considering structural concerns in offering and designing girl’s sports programs, specifically targeting girls for sports programs, assessing girls programs, utilizing female coaches and female program directors as role models, and creating a welcoming and psychologically safe environment (Wright, Cox & Gould, unpublished manuscript). Structural concerns include girls-only programming, providing a variety of opportunities and focusing on skill development.

Lack of motivation, a barrier identified by adolescent girls, can be addressed by providing opportunities that are fun, gender specific, and include a variety of activities (Robbins et al., 2003). At early ages, to meet the needs of girls, it is important that high level skills and competition are not emphasized and the focus is not on outcomes or winning (Yungblut et al., 2012). The influence of peers can be very important for
adolescent females, so opportunities should be provided for girls to participate in programming with their friends (Yungblut et al., 2012). Additionally, programs should be culturally relevant and designed for the population they plan to serve (Thompson, 2011) and girls should also be allowed time to gain skills and confidence in their abilities. It will be insightful for coaches and administrators to incorporate the gathering of feedback from participants, their parents, coaches and administrators to effectively evaluate the impact of programming and make adjustments as needed to enhance program access and structure (Yungblut et al., 2012).

Coaches and program directors that work directly with African American adolescent girls need to be aware of girls’ experiences in sport and physical activity in order to address and combat the image concerns so many girls face. To address issues of poor body image, coaches can play an important role in preventing unhealthy body image by creating dialogue that addresses body images concerns with girls (Coppola, Ward & Freysinger, 2014). Coaches should provide support and encourage healthy fit bodies and avoid criticizing girls about their weight and comparing them to others (Coppola et al., 2014). Additionally, to address girls’ concerns about feeling self-conscious, it has been suggested that programming focus on enhancing girls’ self-esteem to overcome this barrier (Robbins et al., 2003).

It is important to develop more opportunities and better experiences for girls’ sport and physical activity participation within schools through before and after school programs as well as physical education classes. For current physical education programs, it is important for educators to address and attempt to eliminate barriers girls who participate in physical education classes have identified including having to prove their worthiness
and ability to the boys in the class, feelings that girls are supposed to only participate in the gender appropriate class activities, as well as the fear of being embarrassed in front of the class due to lack of skill or feeling self-conscious about their bodies (Fisette, 2013). It is important that these spaces be psychologically safe for girls to participate in because physical education classes may be one of the limited opportunities girls have to be physically active (Dwyer et al., 2006).

Finally, more African American females are needed in coaching and in administrative positions where they can serve as role models and mentors to young African American adolescent girls. All of the girls may not receive a scholarship to play volleyball at the college level but coaching may be an option that they can pursue in college.

**Future Research**

There are several considerations that can be used to inform future research. Based on the findings from this study, a quantitative study could be designed. The quantitative study could be devised based on the themes that emerged from the present study, allowing more African American girls to participate, generating additional data about girls’ participation behaviors. It is also important for researchers to examine the effectiveness of current sport and physical activity programs that are geared toward increasing physical activity levels of African American adolescent girls and how they can maintain sustainability. Assessing the best practices of successful programs will help inform the development of additional effective programs to promote sport and physical activity, increasing opportunities for this population.

The present study is limited to the perspectives of urban African American adolescent girls that are active volleyball players. Future research can be conducted with
girls of different ethnicities, varied socioeconomic backgrounds, and geographic locations. It would also be insightful to compare the perspectives of girls that participate in stereotypical African American sports like basketball and track and field and girls that participate in sports where African American females are underrepresented (e.g., volleyball, soccer, swimming).

While it was concluded that coaches can have a positive influence on the participation of girls, there was a significant amount of feedback about the negative role coaches can play in these girls’ lives. If coaches are not supportive and are unable to provide a positive experience, they can easily influence girls to dropout, especially if girls do not have the continued motivation the girls in the present study possess. Coaches have an important role in the physical, psychological and social development of youth. It is important for future researchers to further explore the role of coaches and the type of training they receive, if any.

Similarly, the perspectives of significant others including parents and siblings could be further investigated. Social support from family members has been shown to be important for encouraging participation in physical activity among this population. Fredricks & Eccles (2004) have shown that the beliefs and behaviors of parents influence the beliefs and behaviors of their children by providing the sport experience (e.g. transportation and financial support), being interpreters of the experience and serving as role models. It is important to understand their perceptions of what is needed to get girls to be active participants in sport and physical activity and encourage them to continue their participation.
Future researchers should further explore the influence of hair maintenance and uniform concerns among active African American girls. As found in the present study, girls in Slater & Tiggemann’s (2010) study expressed concerns about the sport attire they play in. At times, uniforms were too uncomfortable or too revealing and participants discussed how it could potentially lead to girls dropping out, even if they were previously active participants. Similarly, hair maintenance is a major hindrance to physical activity participation among this population and should be examined in depth to understand the cultural basis for this concern as well as further investigate strategies for overcoming this barrier.

Finally, boys have been shown to be a significant barrier to girls’ motivation to participate in sport and physical activity due to continued discouragement, taunting, and teasing. This behavior can be attributed to social influences like traditional gender stereotypes in sport and sport being considered a masculine domain in society. As suggested by Vu et al. (2006), future research is needed “to determine the most effective strategies for addressing boys’ behaviors regarding programs for girls”. As previously mentioned, it may be important for coaches and the parents of boys to teach them to be more accepting of girls as athletes.

It is essential to let boys know that it is acceptable to pass to a girl, select her for a team in physical education class or complement her on her sport skills. This can contribute to a more gender equitable culture and more inclusive environments, leading to more accepting attitudes among boys toward active girls. Beasley (2013) offers a variety of ways physical education instructors can promote gender equity including modifying equipment
and altering rules to maximize participation and promote competence, incorporate cooperative activities, and avoid traditional, gender-stereotyped activities and sports.
APPENDIX A

Demographic Survey
Demographic Questionnaire

Please check/fill in the appropriate information below.

ID: __________________________    Today's Date: ____________________________
Age: ______________________   Grade in the Fall: __________________________
Gender: _____ Male _____ Female    City of Residence: ___________________________
Race/Ethnicity: ________ African-American _________  Hispanic
   ______ American Mayan _________ Asian
   ______ Caucasian _________ Multi-racial
   ______ Other (please identify): ___________________________

In what grade did you start playing volleyball? _______________________________

In the chart below, please check the sports & physical activities you have participated in and when you participated in them.

<table>
<thead>
<tr>
<th>Sports &amp; Physical Activities</th>
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<th>Middle School 6th-8th grades</th>
<th>High School 9th-12th grades</th>
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<td>Softball/Baseball</td>
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<td>Outside Activities (e.g. tag, jump rope)</td>
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<td>Other</td>
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<td>Other</td>
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APPENDIX B

Focus Group Interview Questions
Focus Group Interview Questions

Opening Remarks:
I want to thank each of you for agreeing to participate in my study focusing on girls in sport and girls who play volleyball particularly. As a way to begin, I would like for each of you to take a few minutes to introduce yourself. Some of the information I would like you to include are your name, grade, years playing volleyball, and why you have chosen to play volleyball. Please feel free to share any other information you would like to help all of us get better acquainted.

Introductory Questions:
• When did you first become involved in playing sports?
  - Age for each sport played if possible.

• How did you become involved? Or, who were the people who were most instrumental in getting you involved in sport? Volleyball?

• How active is your family or other members of your family?
  - What activities or sports do they play?
  - What activities or sports did you play with members of your family?

Transition Questions:
• How physically active were you in middle school?

• What are the reasons why you participate in sport and physical activity and stay involved?

• Have you ever thought about dropping out of volleyball? What were the circumstances surrounding your decision to stay? How did you manage to stay involved?

Key Questions:
• Has there been anything that has made it difficult for you to participate in sport and physical activity?

PROBES
Intrapersonal
1. How about if you are not good at your sport? (perceived competence)
2. How about if you are not confident in performing certain skills in your sport like passing or serving? (confidence)
3. How about if you are not having fun? (enjoyment)
4. Has the way you felt about your body ever made it difficult for you to participate in sport and physical activity? (body image)

Interpersonal
1. How about your parents?
2. How about your siblings?
3. How about your friends?
4. How about boys?
5. How about others like coaches or teachers?
Environmental
1. Are there enough places in your community to participate in sport and/or to be physically active? What types of facilities are available to you?
2. What about participating in sport and physical activity in your neighborhood/community? (Safe to walk, jog, bike? Crime? Well lit at night? Clean?)

Sociocultural
1. How about gender stereotyping (boy sports vs. girls sports)?
2. How about your hair?
3. How about your uniform?
4. How about the media?

- Are there any other reasons other girls your age do not participate in physical activity?
- As active sport participants, how have you been able to overcome some of the challenges and barriers you have mentioned?
- What can be done to encourage more young girls to participate in sport and physical activity and keep them involved?
- There are many girls your age who are currently dropping out of sport now. If you were given the opportunity to develop a program for girls to get them to participate in sport and physical activity, what would you make sure your program included?

Ending Questions:
- What other thing would you like to say that you have not had the chance to share about girls getting involved in sport and staying involved?

Thank you so much for your help in my research. I appreciate your time and thoughtful responses.
Research Questions and Focus Group Interview Questions
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Focus Group Questions</th>
<th>Theoretical Framework</th>
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<tbody>
<tr>
<td>RQ1: What were the challenges and barriers girls faced while participating in sport?</td>
<td>Has there been anything that has made it difficult for you to participate in sport and physical activity?</td>
<td>Intrapersonal Factors</td>
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<td>PROBES:</td>
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<td></td>
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<td>PROBES:</td>
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<td></td>
<td>1. How about your parents?</td>
<td>Interpersonal Factors</td>
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<td>2. How about your siblings?</td>
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<td>PROBES:</td>
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<td>Socio-cultural Factors</td>
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<td>Are there any other reasons other girls your age do not participate in physical activity?</td>
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<td>RQ2: What strategies, techniques and support systems did they utilize to overcome these challenges and barriers?</td>
<td>As active sport participants, how have you been able to overcome some of the challenges and barriers you have mentioned?</td>
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<td>RQ3: What are the components of quality sports programs that engage girls and keep them participating in sport?</td>
<td>What can be done to encourage more young girls to participate in sport and physical activity and keep them involved?</td>
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<td>There are many girls your age who are currently dropping out of sport now. If you were given the opportunity to develop a program for girls to get them to participate in sport and physical activity, what would you make sure your program included?</td>
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APPENDIX D

Assent Form
Assent Form (PARTICIPANT)

You are invited to participate in a research study conducted by Ramona Cox, a doctoral student under the supervision of Dr. Martha E. Ewing from Michigan State University. The primary goal of this study is to address the barriers African American adolescent girls in urban areas experience in participating in sports and physical activity programs and how girls who continue participation overcome the barriers. While you will not directly benefit from participating in this study, information gathered from this study will be used to inform the development and improvement of quality sports and physical activity programming that will engage and encourage continued participation among African American adolescent girls.

Participation in this study will involve a survey, which will take approximately 10 minutes as well as a 60-90 minute focus group interview with 3-4 other girls with the primary investigator. The survey asks about your experiences participating in sport and physical activity. Interview questions will focus on your participation in sports and physical activity programs including reasons for joining, likes and dislikes, responses of friends and family, and recommendations for future programs. The interview will be audio and video taped and transcribed. All results from the interview will be kept strictly confidential and used only for research purposes.

Because confidentiality is such an important issue, several measures will be undertaken to assure the confidentiality of your responses. All of the data collected for this study (surveys, audio and video tapes and transcripts) will be stored in a locked file cabinet for three years past the completion of this study. The audio and video tapes will then be erased and the transcripts and surveys will be destroyed. Your confidentiality will be protected to the maximum extent allowable by law.

Anonymity will also be maintained as the actual name of any participant will not be used on the transcribed interviews, nor will they appear when the results are described in any written manuscript. ID codes for the survey will consist of your initials and birthday month and year to form a unique code. A pseudonym will be assigned to participants who participate in the focus group interview. Only the researchers directly involved in the study will have access to the research data.

There is a small risk that your participation in this research study will result in you feeling self-conscious about answering questions or being interviewed in the presence of other girls. If at any time you feel self-conscious or uncomfortable about answering questions or being interviewed, you can refuse to answer certain questions or withdraw from the study at any time.

Participation in this study is voluntary and you can refuse to participate in any part or withdraw at anytime from this study without penalty. You have the option to refuse to participate in this study even if you have signed this assent form. If you have any questions concerning or questions about this study such as scientific issues, how to do any part of it, or to report an injury, please contact the principal investigator Dr. Martha E. Ewing at 201 IM Sports Circle, East Lansing, MI 48824, (517) 353-4652 or mewing@msu.edu or Ramona Cox at 7730 Stahelin, Detroit, MI 48228, (313) 587-8952 or coxramon@msu.edu. If you have any questions or concerns about your role as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University Human Research Protection Program at (517) 355-2180, fax (517) 432-4503, e-mail: irb@msu.edu, or regular mail: 207 Olds Hall, Michigan State University, East Lansing, MI 48824.

Thank you for your time and cooperation,

______________________________      ____________ _________
Martha E. Ewing, Ph.D., Principal Investigator      Date

______________________________      ____________ _________
Ramona Cox, Graduate Student           Date
*Your signature below indicates your voluntary agreement to participate in this study and to be audio and video taped during the interview.

_________________________________      ____________ _________
Parent/Guardian Signature         Date
APPENDIX E

Consent Form
How urban African American adolescent girls survive in sport:
The influence of perceived intrapersonal, interpersonal, environmental and sociocultural factors.

Consent Form (PARENT)

Your child is invited to participate in a research study conducted by Ramona Cox, a doctoral student under the supervision of Dr. Martha E. Ewing from Michigan State University. The primary goal of this study is to address the barriers African American adolescent girls in urban areas experience in participating in sports and physical activity programs and how girls who continue participation overcome the barriers. While your child will not directly benefit from participating in this study, information gathered from this study will be used to inform the development and improvement of quality sports and physical activity programming that will engage and encourage continued participation among African American adolescent girls.

Participation in this study will involve a survey, which will take approximately 10 minutes as well as a 60-90 minute focus group interview with 3-4 other girls with the primary investigator. The survey asks participants about their experiences participating in sport and physical activity. Interview questions will focus on your child’s participation in sports and physical activity programs including reasons for joining, likes and dislikes, responses of friends and family, and recommendations for future programs. The interview will be audio and video taped and transcribed. All results from the interview will be kept strictly confidential and used only for research purposes.

Because confidentiality is such an important issue, several measures will be undertaken to assure the confidentiality of your child's responses. All of the data collected for this study (surveys, audio and video tapes and transcripts) will be stored in a locked file cabinet for three years past the completion of this study. The audio and video tapes will then be erased and the transcripts and surveys will be destroyed. Your child's confidentiality will be protected to the maximum extent allowable by law.

Anonymity will also be maintained as the actual name of any participant will not be used on the transcribed interviews, nor will they appear when the results are described in any written manuscript. ID codes for the survey will consist of your child's initials and birthday month and year to form a unique code. A pseudonym will be assigned to participants who participate in the focus group interview. Only the researchers directly involved in the study will have access to the research data.

There is a small risk that participants in this research study will feel self-conscious about answering questions or being interviewed in the presence of other girls. Girls will be informed that if they feel self-conscious or uncomfortable about answering questions or being interviewed, they can refuse to answer certain questions or withdraw from the study at any time.

Participation in this study is voluntary and you can refuse to allow your child to participate in any part or withdraw at anytime from this study without penalty. Your daughter has the option to refuse to participate in this study even if you have signed this consent form. If you have any questions concerning or questions about this study such as scientific issues, how to do any part of it, or to report an injury, please contact the principal investigator Dr. Martha E. Ewing at 201 IM Sports Circle, East Lansing, MI 48824, (517) 353-4652 or mewing@msu.edu or Ramona Cox at 7730 Stahelin, Detroit, MI 48228, (313) 587-8952 or coxramon@msu.edu. If you have any questions or concerns about your child’s role as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University Human Research Protection Program at (517) 355-2180, fax (517) 432-4503, e-mail: irb@msu.edu, or regular mail: 207 Olds Hall, Michigan State University, East Lansing, MI 48824.

Thank you for your time and cooperation,

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Martha E. Ewing, Ph.D., Principal Investigator  Date

_________________________________  ____________ _________
Ramona Cox, Graduate Student  Date
*Your signature below indicates your voluntary agreement to allow your child to participate in this study and allow your child to be audio and video taped during the interview.

Parent/Guardian Signature

Date
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