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African-American Collegiate Women's Perception And Participation In Physical Activity

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**AFRICAN-AMERICAN COLLEGIATE WOMEN'S PERCEPTION AND
PARTICIPATION IN PHYSICAL ACTIVITY**

by

LAUREN C. SCOTT

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

2018

MAJOR: Kinesiology

Approved By:

Advisor

Date

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DEDICATION

To every young woman that has ever been told “you’ll never make it,” keep going and never give up. Your destiny is controlled by your determination!

ACKNOWLEDGEMENTS

I write this with a humble spirit and a grateful heart, giving all my praise and all the glory to God. Without God's grace or mercy this would not be possible. It is with an abundance of love, joy and admiration that I say thank you to my husband, Everard Scott. Without your unwavering commitment to our family and your never-ending supply of patience, I would have given up a long time ago. Thank you for believing in me when I didn't believe in myself. To Payton and Isaiah, my greatest blessings ever, thank you for choosing me to be your mommy - because of you I continue to persevere and push myself so that you can have a solid foundation. To my family, my brother (Martin) brother in-laws (Victor and Tyrone), my mother (Karen), my mother-in law (Joan) and my favorite cousin (Ronisha), Thank you so much for your continued support and words of encouragement, you have no idea how much they helped me along this journey. To my best friends (Shana, Terrell, Tori and Weezy), thank you for the laughs, allowing me to vent and cry and always being available when I called; I only hope that I can be half of the friend you all have been to me over the past four years!

To my Dissertation Committee, where would I be without your relentless dedication to my research!? Dr. Bo Shen, it has been a journey that has taken us through ups and downs, smiles and frowns but most importantly a bond was formed that I will always cherish. Thank you for always challenging me, providing valuable feedback and giving me plenty of pep talks over the past four years. Dr. Nate McCaughtry, thank you for seeing the inner scholar in me and allowing me to grow both personally and professionally in this program. Your willingness to make yourself available to me and provide great feedback and advice, leaves me eternally appreciative. Dr. Erin Centeio, your class was the very first class I took as a doctoral student and while I knew I was going to fail, you made sure I felt confident and took time out of your busy schedule to respond to all my

concerns. Now, here we are four years later, and you still take time out of your schedule to not only respond to my concerns but to also include me on projects and opportunities that would further advance my skill set. Thank you for sharing your expertise on this project and showing me that being a mom and a professor/researcher is possible. Dr. Krista Brumley, you represent everything I hope to be as a future professor. The passion you have for your research interests and the excitement you bring to the classroom is unmatched. Thank you for sitting on my committee and giving me the tools I need to do qualitative research. I am forever indebted to you all and I pray that as I transition from my role here at Wayne State University our lines of communication remain open and I continue to make you all proud!

Finally, thank you to all my colleagues in the Kinesiology department at Wayne State University. Although we will go our own separate ways, I will always cherish our time in class and the ways in which we always encouraged each other to do better and push through. These have been some of the toughest times of my life, but I leave here a better person, ready to serve a new generation of scholars and practitioners.

PREFACE

In the following pages, you will go on a journey with me and explore “African-American collegiate women’s perception and participation in physical activity.” Guided by my own personal experiences in physical activity as an African-American, woman and college student, my dissertation research seeks to gain a deeper understanding of factors that impact the physical activity participation of this population. Research and writing for this study began in October of 2016 and continued through to October of 2017. While the task was intimidating, humbling and overwhelming, it ultimately resulted in one of the most gratifying accomplishments of my academic career.

I would like to thank my academic Advisor once again, Dr. Bo Shen for his commitment and constant guidance during this process. An abundance of gratitude is owed to my departmental secretary Mrs. Carol Salisbury and our Assistant Dean Dr. Nate McCaughtry. I will never forget the financial support, administrative support and overall encouragement from the both of you. I would like to thank Ms. Danielle Wright of Wright Relations LLC for her expertise, attention to detail and support during the tedious editing and formatting process. Finally, the most important part of this process has been the interaction I’ve had the pleasure of having with all the wonderful young women who participated in both the completion of the surveys and focus group interviews. Without the participants, this study would not exist, and I am forever grateful for you all.

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LIST OF ABBREVIATIONS

Abbreviations

Explanations

AA	African-American
PA	Physical Activity
TPB	Theory of Planned Behavior (theoretical framework)
BFT	Black Feminist Thought (theoretical framework)
IBM	Integrated Behavioral Model (theoretical framework)
PBC	Perceived Behavioral Control

CHAPTER 1: INTRODUCTION

Overview of the Study

The objective of this study is to examine African-American (AA) collegiate women's intention and actual participation in physical activity (PA), as well as how their perceptions of cultural and gender identification influence their decision-making process about PA participation. In chapter one I will present six significant issues driving the formation of this study. First, I will focus on the sedentary behaviors of adults in the United States and how gender and ethnicity are moderators of PA participation. Second, I will briefly discuss the PA levels of collegiate students in the United States and narrow down my population to AA women in college and their known levels of PA participation. Third, I will outline several consequences faced by individuals in the United States due to obesity and a lack of physical activity. Fourth, I will discuss the potential impact of participating in PA during the college years. Fifth, I will discuss factors related to AA women's PA participation. Last, I will explore how ethnicity and gender identity, as well as the constructs from the Theory of Planned Behavior (TPB) can be used to better understand college AA women's PA participation. I will conclude the chapter by offering the justification and research questions that steer the study.

Physical Inactivity of Adults in the United States

Physical activity is defined as any bodily movement that increase energy expenditure above resting levels (Center for Disease Control [CDC], 2010). In the United States, adult engagement in physical activity has decreased since the implementation of the 2008 PA guidelines (U. S. Department of Health and Human Services [USDHHS], 2008). According to these guidelines, adults should engage in 150 minutes of moderate-to-vigorous PA every week, as well as muscle building/strengthening activities at least twice a week. In 2012, using the World Health

Organization data, Hallal, Andersen, Bull, Guthold, Haskell and Ekelund found that 40-49% of adults (age 15 and over) were physically inactive in the United States. In 2013, only 20% of Americans met the PA recommendations. In 2014, research showed that 23% of adults did not engage in any leisure PA in the United States (USDHHS, 2016). Over the last two decades the physical inactivity behaviors of Americans has not decreased significantly. Pratt, Macera and Blanton (1999) found that in 1996, 29.2% of adults were inactive, 43.1% did not participate in enough PA to see any health benefits and only 12.6% of those meeting the recommended guidelines for PA engaged in vigorous activity three or more times a week.

Overall, children are more physically active than adults; however, the time spent engaging in sedentary behavior increases with age (Matthews, Chen, Freedson, Buchowski, Beech, Pate, & Troiano, 2007). Between 12-15 years of age the average time spent in moderate-to-vigorous physical activity (MVPA) drops by at least one third and continues to drop between the ages of 16-19 years old and thereafter. (Troiano, Berrigan, Dodd, Masse, Tilert & McDowell, 2007; Matthews et al, 2007). In the United States, adult sedentary behavior has become an epidemic.

Gender and Ethnicity as moderators of PA Participation

In general, women were found to be less active than men from youth through adulthood (Matthews et al, 2007). Researchers (Caspersen, Pereira & Curran, 2000; Brownson, Boehmer & Luke, 2005) reported that men have higher levels of PA over a lifetime and are more likely to meet recommended PA guidelines than women. Also, men are reported to have higher levels of MVPA when compared to women (Tucker, Welk, & Beyler, 2011). During adolescence (ages 9-18), boys participate in more regular and vigorous PA than girls. There is a significant decline in girls' PA levels between the ninth and 12th grade (Pratt, Macera & Blanton, 1999). Results from the same study show 72% of male high school students reported engaging in vigorous PA, compared to only

54% of female high school students. As age increases the time spent being inactive also increased for both groups. Women's sedentary behavior increased to 24% by the time they were 20 years old but only increased for men by 6% (Caspersen, Pereira & Curran, 2000). Troiano et al. (2007) found that women between the ages of 20-29 participated in as little as 23 minutes of daily MVPA.

Not only does research show that men take part in more MVPA, but the type of PA also varies by gender. Gard and Meyenn (2000) suggest that, while men demonstrate a desire for physical contact in sports as central experiences to establish an acceptable masculine identity (Gard and Meyenn 2000), women struggle to negotiate their gender positions in those sports and physical activities where their role is ambiguous or contradictory to social and cultural expectations (Flintoff & Scraton, 2001). Gender stereotyping encourages men and women to stay within the bounds of gender-appropriate activities. Consequently, Blair, Fogelholm, Van Bakk and Rissanen (2003) reported that men prefer competitive PA and strength conditioning, compared to women who prefer "light exercise" such as walking or aerobic style PA.

With research showing women are less active than men, it is important to take a more in-depth look at this population and its subsets. Studies show that ethnic minorities, such as AA and Hispanic women, are less active than white women (Wilcox, Castro, King, Housemann & Brownson, 2000; Eyster, Vest, Sanderson, Wilbur, Matson-Koffman, Evenson, & Young, 2002; Ransdell & Wells, 1998; Crespo, Smit, Andersen, Carter-Pokras & Ainsworth, 2000). In 1993, Yeager, Macera & Merritt found that 44.9% of AA women were inactive compared to white women (29.5), Hispanic women (36.4) and women of other ethnicities (36.0).

Research also reveals that AA women have the lowest levels of PA and over 50% of AA women participate in less than 1 hour of PA per week and only 20 minutes of MVPA (Cowie, Harris, Silverman, Johnson & Rust, 1993; Felton, Body, Bartoces & Tavakoli, 2002; Troiano et

al, 2007). Between the years of 2011-2013, 57% of AA women reported being obese, compared to 34% of white women (Ogden, Carroll, Kit & Flegal, 2014). With just 36% of AA women meeting the 2008 PA guidelines (Joseph, Keller, Affuso & Ainsworth, 2016), it is imperative to explore both antecedents and barriers to PA within this population.

Collegiate students' PA Level

Currently 18 million adults between the ages of 18-24 are enrolled in college in the United States (Fountaine, Ligouri, Mozumdar & Schuna, 2011). Collegiate students' levels of PA are not higher than the general population. According to the American College Health Association 21.6% of collegiate students were overweight and 12.5% were classified as obese (American College Health Association, 2011). In a 2016 study conducted by the American College Health Association (ACHA), only 20.5% of college student reported participation in moderate aerobic PA between 5-7 days a week. Male collegiate students are more physically active than female collegiate students (Buckworth & Nigg, 2004; Keating, Guan, Piñero & Bridges, 2005) and overall, only 18% of collegiate students engage in PA five or more days a week (Fountaine et al, 2011)

In a study tracking freshmen female collegiate students, Jung, Bray and Ginis (2008) revealed that during the first year of college, 66% of the female participants gained weight and saw an increase in their body mass index (BMI) and a decline in PA. Along with these findings, overall participation in PA, and sports, decreased by 26.6% in women during the transition from high school to college (Jorgensen & Jordan, 1993; Han, Dinger, Hull, Randall, Heesch, & Fields, 2008). Of the women surveyed by Ainsworth, Berry, Schnyder & Vickers (1992), 82% were considered as low active with very poor aerobic fitness.

PA levels in African-American collegiate women

Currently, there is an abundance of literature focused on PA levels of AA women in urban areas; however, the majority of this work concentrates on youth in grades kindergarten-12 (e.g., Garcia, Broda, Frenn, Coviak, Pender, & Ronis, 1995; Trost, Pate, Ward, Saunders & Riner, 1999; Martin, McCaughtry, Flory, Murphy & Wisdom, 2011) and populations age 35 and older (e.g., Felton, Dowda, Ward, Dishman, Trost, Saunders & Pate, 2002; Harley, Odoms-Young Beard, Katz & Heaney, 2009; Wilbur, Chandler, Dancy Choi & Plonczynski, 2002). Research lacks related to AA collegiate women's PA levels and what antecedents or determinants for PA engagement may exist. As one of few, Suminski, Petosa, Utter and Zhang (2002) found that minority women, particularly AA, are the least physically active in college. AA collegiate women are significantly less physically active than their Caucasian counterparts. With AA, collegiate women being the most sedentary population, it is important to seek out information about and better understand the PA levels of this population. Often, college campuses are prime locations to promote and encourage a physically-active lifestyle, therefore decreasing this population's sedentary behaviors and health risks (Racette, Deusinger, Strube, Highstein, & Deusinger, 2005).

Consequences of Obesity and Physical Inactivity

Within the last two decades, the prevalence of obesity has risen exponentially. Along with the influx of obesity in individuals in the United States, there has been an increase in obesity-related diseases. Cardiovascular disease, type 2 diabetes, various forms of cancer, high blood pressure, musculoskeletal disorders (osteoarthritis), and even sleep apnea have all been linked to obesity (Finkelstein, Ruhm, Kosa, 2005, Slawta & DeNeui, 2009). According to the Center for Disease Control, 36% of adults in the United States are obese, with non-Hispanic black women having the highest percentage of obesity (56.9%) (CDC, 2014). AA women have higher rates of

cardiovascular disease, obesity, diabetes and high blood pressure (American Health Association, 2001; Rohm-Young, Gittelsohn, Charleston, Felix-Aaron & Appel, 2001). Obesity has been the second-leading cause of death among Americans, with 400,000 deaths per year (Finkelstein, Ruhm, & Kosa, 2005), and the fifth-leading cause of death worldwide with 3.4 million deaths annually (Smith & Smith, 2016).

Obesity has also been linked to an increase in medical care, causing a strain on economic productivity (Finkelstein, Ruhm, & Kosa, 2005; Sweeney, Glaser, & Tedeschi, 2007). In 2008, obesity cost individuals in the United States \$147 billion (Finkelstein, Trogon, Cohen, & Dietz, 2009). Obesity makes up .7%-2.8% of a country's total healthcare expenses; individuals who are obese may pay up to 30% more in healthcare costs compared to non-obese individuals (Juni, 2015, Withrow & Alter, 2011). Along with physical and monetary consequences, obesity is also linked to psychosocial consequences, such as depression, low self-esteem and stigmatization (Napolitano, Hayes, Bennett, Ives, & Foster, 2013). A vulnerable population for weight gain, collegiate students play an enormous role in the obesity epidemic, as 31-35% of collegiate students are classified as overweight or obese (Napolitano et al, 2013).

Unfortunately, there is no single solution to end the obesity epidemic. A multitude of approaches have been suggested by the CDC, the surgeon general and in previously published literature. These methods include utilizing resources from state and local government, school programming for healthy eating and PA, grassroots community programming and individual healthy living habits (PA, healthy eating choices and other lifestyle changes). Studies indicate that weekly engagement in the recommended amount of PA can ward off obesity and obesity-related consequences (Rohm-Young et, 2001; CDC 2014; USDHHS, 2008).

Potential for College PA

Improving collegiate students' PA levels is a major concern, as some investigations uncovered that the PA patterns of college seniors continue into their adulthood (Keating et al, 2005, CDC, 2009). It is estimated that between 81-85% of adults keep the same PA behaviors they practiced during their senior year of college (Todd, Czyszczonek, Carr, & Pratt, 2009, Driskell, Goebel, & Kim, 2005). Whether sedentary or physically active, college seniors remain the same into their adult life. Owen, Salmon, Bauman, Sallis, and Lo (1999) brought to light that physical environments have the capacity to promote or impede PA. One physical environment that is scarcely examined is the college/university campus. Many colleges/universities offer modern facilities for recreational use, intramural sports, classes for exercise/PA and have walking trails and other PA-friendly campus environments. With a vast number of facilities and equipment readily available, college campuses offer great opportunities to mold students' PA behaviors (Leslie, Sparling & Owen, 2001). While college campuses can be a great beacon for shaping PA, the impact of this environment on the population in question has not been explored enough.

Leenders, Sherman, and Ward (2003) found that students who engage in PA courses have different motivations than the general population of collegiate students for participating. In the same study, 66% of female collegiate students reported being less likely to participate in PA long enough to work up a sweat outside of their PA class. The study also suggests that PA classes for women should be structured to appeal to women, thereby encouraging enrollment. While research shows how a college campus can positively promote PA for the college population, it does show that there is some concern for recruiting and helping women maintain PA outside of credit courses. In addition to the concern for female participation, the need to explore the opinions and participation of college campus recreation and PA in AA collegiate women is crucial.

Factors Related to AA Women's PA Participation

Minority women, predominantly AA, have reported numerous barriers and motivational factors for PA involvement. Barriers such as shortage of time, a shortfall of social support, lack of access, health concerns, safety, income, diminishing self-efficacy, scarcity of PA role models, hair maintenance, unclear definitions of PA/exercise and cultural expectations have been well-documented in previously published studies (e.g., Eyler et al, 1998; Harley et al, 2009; Eyler et al, 2002; Wilbur et al, 2002). In contrast, several researchers have discussed various motivational factors that have helped AA women start and/or maintain physical activity. Support from medical providers/friends and family, health concerns, mood enhancements and self-efficacy were all listed as antecedents for this population's PA (Felton et al, 2002; Rohm-Young et al, 2001).

As it relates to PA, social support is the perceived encouragement and/or assistance received from others, such as family and friends (Anderson, Wojcik, Winnett, & Williams, 2006), and is a major factor in PA participation among AA women. Socioeconomic status influences an individual's access to facilities, and ultimately, their ability to participate in PA. Cultural differences also sway a person's motivation to engage in PA. In the AA community, hair maintenance may serve as a barrier to being physically active (Joseph et al, 2016). Joseph et al. (2016) also found that body shape preference and caretaking responsibilities also greatly influence AA women's participation in PA. These are just a few sociocultural factors documented as providing both barriers and sometimes antecedents to PA among AA women.

While the above mentioned discussed AA women as a whole, the influence of culture and body image have yet to be explored extensively as to whether or not they have a major impact on the choices AA collegiate women make regarding PA. Eyler et al. (2002) recommended that, to

better understand the cultural factors that may be antecedents or inhibit PA in certain ethnic groups, there must be proper representation in future studies.

Researchers found that AA collegiate women have higher body image satisfaction than Caucasian collegiate women (Abrams, Allen & Gray, 1993). Additionally, those who have higher cultural identification have lower body dissatisfaction (James, Phelps & Bross, 2001). AA collegiate women studied by James, Phelps and Bross (2001) showed internalization and acceptance of the beauty standards of the dominant culture. In this study, AA collegiate women that identified more with the dominant culture (Caucasian) showed higher levels of body dissatisfaction. AA culture is more accepting of various body weights and shapes; therefore, the pressure of maintaining a certain weight and look has little effect on this population (Duncan & Robinson, 2004). AA collegiate women had higher BMI levels than any other race but also reported lower levels of body dissatisfaction (Akan & Grilo, 1995; Yates, Edman, & Aruguete, 2004). The previous research, briefly mentioned above, provides a legitimate reason to maximize efforts to understand how racial identification influences AA collegiate women's body acceptance and views on PA.

Intersectionality of Ethnicity and Gender for Understanding AA Collegiate Women's PA Participation.

Identity is, in general, the way a person views themselves as a member of a certain group or setting compared to another group or setting (Stets & Burke, 2000). In discussing identity theory, the most important conception to understand is that identity is not just how a person views themselves within a group or within a certain role; it is also the actions they take to display their status and position within a specific group. For example, an individual may wear certain clothes or style their hair a certain way to identify with their culture or participate in certain sports affiliated

with their culture. The views of others are not as important as the individual's self-identity (Stets & Burke, 2000).

While identity is composed of both social and individual groupings, there are numerous identities to which an individual can attach themselves. While many of these identities are visual, some consist of nonvisual characteristics. Tatum (1997) discussed how, in America, individuals face different experiences based on their racial identities. Cross (1995) gives a detailed account of how AAs' identity was developed through a model called "Nigrescence". The term Nigrescence is the process that AAs experience to re-socialize themselves to be more Afrocentric, rather than Eurocentric (Cross, 1995). This model, used to better understand AA racial identity development, includes four stages: pre-encounter, encounter, immersion-emersion and internalization. Many authors have found ways to incorporate this model into various settings, ranging from education, employment and sport/PA participation. Racial identity influences the types of sports/physical activities in which AAs participate, as well as the type of acceptance gained by participating in certain activities. Also impacted are the development of an athletic identity, as well as dispelling and accepting stereotypes (Harrison Jr, Harrison & Moore, 2002, L. Harrison, A. Lee & D. Blecher, 1999).

Harrison Jr, Harrison & Moore (2002) explain how AA youth who demonstrate an immersion attitude choose sports such as basketball, track and field or football as appropriate for them and their understanding of their racial identity. The authors went on to show that by choosing certain sports, these young AA athletes gain acceptance, not only within their own race, but with other races based on their athletic ability and appeal. In determining the relationship between AA women's racial/cultural identification and PA participation, it is critical to understand how racial identity plays a key role in the choice of PA

Gender identification is also very important in determining how AA women perceive PA. As with racial identity, gender identity is another aspect of a person's overall social identity. The significance a person places on their gender and what it means to be either a man or a woman is expressed similarly to race. For some women, identifying as a woman may mean they do not want to sweat or that working out is only for guys. For other women, identifying as a woman may mean putting their family's needs before their own, or cutting out any free time for physically active. Identity theory will be applied to this study because, as previous bodies of work discovered, identity, whether racial or gender, has an influence on the types of activities in which a person engages, the way in which they seek to establish themselves socially and how they express themselves as individuals.

The intersectionality of ethnicity and gender leads us to the black feminist thought (BFT) theory by Patricia Hills-Collins (2000). Most researchers who examine race and gender often based their work on the understandings of middleclass Caucasian women and do not consider the experience of AA women (Burgess, 1994). AA feminist Patricia Hill-Collins, discusses how the experiences of this population of women should be shared and are critical because they illuminate how gender and race intersect and result in oppression for this group. Black feminist perspectives are important because they allow AA women to express how they view the world (Hills Collins, 2002).

BFT, as discussed by Hill-Collins (1986), seeks to bring forth ideas produced by AA women that clarify perceptions of and for AA women. With this purpose, the author lists assumptions related to the definition of BFT: 1). Black women have a unique standpoint on their experiences and certain commonalities of these experiences will be shared by black women as a

group, 2). There is diversity among black women based on age, sexuality, class and other social locations that will shape the expression of these shared themes by the individual.

The Theory of Planned Behaviors and Integrated Behavioral Model

The Theory of Planned Behavior (TPB) was originally penned by Icek Ajzen in 1988 to add to the understanding of behavior intentions from the theory of reasoned action (Fishbein & Ajzen, 1975). TPB is an extension of the theory of reasoned action and is a direct result of a limitation from one of the theory's constructs, known as behavioral intention. TPB purposely examines the intention of an individual to participate in a certain behavior (Ajzen, 1991). To measure intention, TPB contains three behavior centered factors - attitude toward behavior, normative beliefs and perceived behavioral control. These three factors lead to the intent to engage in a given behavior (Ajzen, 2006). Particularly, TPB suggests that attitudes, subjective norms, and perceived behavioral control are traced to corresponding sets of behavior-related beliefs.

Behavioral beliefs are developed based on how an individual associates a behavior with certain characteristics, attributes or previous events. Behavioral beliefs within TPB can represent a favorable or unfavorable attitude toward a certain behavior. These beliefs ultimately link the behavior to a certain outcome or attribute (Ajzen, 1991), which can be either positive or negative for an individual. The more positive the attitude or behavioral belief is toward a behavior, the more likely the individual will intentionally engage in that behavior (Ajzen, 2006).

Normative beliefs focus on individuals' concern about the likelihood that valuable people in their lives will approve or disapprove of participation in a given behavior (Ajzen, 1991). This construct also looks at what motivates a person to comply with the approval or disapproval of the behavior by family, friends, partners and others in society. Normative beliefs translate into subjective norms when an individual's perception of beliefs of important people in their lives

intermingle with their own motivation to comply with those beliefs (Shen, Rinehart-Lee, McCaughtry & Li, 2012). The final factor in TPB is perceived behavioral control. According to Ajzen (1991), perceived behavioral control plays an important role in TPB and is the determining factor that separates TPB from the theory of reasoned action. Perceived behavioral control considers the lack of volitional elements present when attempting to and/or participating in any behavior (Ajzen, 2002).

High levels of perceived behavioral control in relation to a certain behavior are linked to a stronger intention to perform that behavior. In addition, perceived behavioral control can impact behavior indirectly because of its influence on intention (Ajzen, 2002). This individual construct of TPB has been closely related to perceived self-efficacy (Bandura, 1977). Perceived self-efficacy, according to Bandura (1998), is the belief in one's capabilities to organize and execute the courses of action required to produce given levels of attainments. This definition helps demonstrate the similarity between perceived behavioral control and perceived self-efficacy, as both show concern with an individual's perceived ability to perform a behavior (Ajzen, 2002).

In recent years, TPB has been further developed into an Integrated Behavioral Model (IMB) that includes constructs from TPB and other influential factors (Montano & Kasprzyk, 2015). Specifically, there are two additional influential factors directly affecting behavior - environmental constraints and habit. It is believed that even if a person has a strong behavioral intention, there should be no or few environmental constraints that make behavioral performance difficult or impossible. Also, experience in performing the behavior may make it habitual, which may result in intention becoming less important in determining behavioral performance for these individuals. For this reason, the current study will not only evaluate the direct effect that

behavioral, normative and control beliefs have on intent to engage in PA but also explore what type of effect environmental factors have on this population's decision to be PA.

TPB has been used to explore PA in various populations and settings. For example, Shen et al. (2012) used TPB to examine urban AA high school girls' participation in physical education. The authors found that unfavorable attitudes and lack of perceived support hindered their intentions to participate in physical education in the future. The study also found that a mother's influence (normative belief) and scheduling conflicts (perceived behavioral control) were related to intention for this population.

Commonalities between Theoretical Frameworks

The intersectionality of race and gender, as discussed in previous paragraphs is a fundamental perspective that needs to be explored more in various settings. Using the BFT framework to inform my research is a necessity, as my targeted sample will undoubtedly have unique standpoints and experiences regarding PA due to their status as women and AA women. As previous studies have shown there is a lack of representation of AA women in the literature exploring PA participation in collegiate women. The choice to use BFT in conjunction with the theory of planned behavior is based upon the intersectionality of both frameworks.

BFT and TPB were selected for this study because they best answer the research questions. More importantly, they are complementary and mutually supportive of one another. BFT seeks to provide definitions or meanings of culture through the eyes of AA women from different social locations. BFT also provides a platform for AA women to express the attitudes and personal experiences that inform their decisions to engage in various activities. At the same time, TPB looks to determine how attitude beliefs impact an individual's intention to participate in a certain behavior.

While TPB does not explicitly evaluate culture, normative beliefs and the influence of valuable people in an individual's life can be culturally specific. Finally, BFT allows AA women to define themselves and accept or reject portrayal of their likeness in society. Perceived behavior controls, the final construct in TPB is the individual's perception of their ability to perform a certain behavior. This construct can ultimately solidify how the combination of all aspects of BFT influence an AA woman's decision to complete a specific action.

Significance of Study

The previous sections reveal and explain how and why sedentary behavior is a serious problem within our country, specifically within the AA community. While most research has been conducted with AA female adolescents or older adults, there is a clear need to explore PA and sedentary behavior of female AA currently matriculating through college. Given the facts on the prevalence of obesity in AA women and collegiate students, it is imperative to use the college setting to explore ways to better understand the factors influencing PA for this population.

There is a deficiency in the amount of published literature specifically related to motivation issues and PA engagement in AA collegiate women. Moreover, existing discourse has not been updated in recent years. Previously published quantitative studies that examine collegiate students' motivation, both male and female, have used research samples made up of mostly Caucasian participants. Minorities in these studies represented less than 20% of the total population (e.g., Buckworth & Nigg, 2004; Kilpatrick, Hebert & Bartholomew, 2005; Sallis, Johnson, Calfas, Caparosa & Nichols, 1997). With such a small percentage of representation, the results from those studies cannot be used to make generalized statements about the overall AA collegiate women population.

Qualitative studies that explicitly explored the barriers to PA, as well as the influence of body image and culture on PA in AA collegiate women, must be discussed as well. Although the majority of explorations that implement qualitative research methods for PA in AA women use participants between ages 18-40 years and older with varying levels of education and occupations (e.g., Sebastião, Chodzko-Zajko, & Schwingel, 2015; Tudor-Locke, Henderson, Wilcox, Cooper, Durstine, & Ainsworth, 2003; Eyler et al, 1998; Banks-Wallace, 2000; Wilbur et al, 2002; Harley et al, 2009; Huebschmann, Campbell, Brown, & Dunn, 2015), the number of qualitative studies that looked exclusively at AA collegiate women is substantially low.

This study seeks provide valuable insight on a sample of AA female collegiate students and their attitudes, normative beliefs and perceptions of ability to be physically active. This will be done through the BFT perspective and will be based on the four constructs (attitude, normative beliefs, perceived behavioral control, and environmental factors) of the TPB. This study executes both qualitative and quantitative approaches, making it one of few using a mixed method approach for AA collegiate women. Findings from this study could provide both researchers and practitioners with a better understanding of the needs and wants of this population related to PA engagement. The findings can be used to discover and implement new ways of promoting PA participation to this population, as well as developing solutions to help alter negative values and sedentary behaviors of AA collegiate women.

Purpose of this Study

The purpose of this study is to examine AA collegiate women's actual PA participation and how their perceptions of cultural and gender identity influence their decision making about PA participation. Specifically, there are three major research questions:

1. How physically active are AA collegiate women who attend an urban university?

2. How could attitudes, subjective norms, environmental factors, and perceived behavioral control influence AA collegiate women's actual participation in PA?
3. What possible gender, racial, and cultural identity factors do AA collegiate women perceive to be influential in their decision about PA participation?

CHAPTER 2: THEORETICAL FRAMEWORKS

The research questions specifically look at the impact of individual experiences involving attitude, behavior and subjective norms and identity on PA participation. To better understand how an individual can be influenced to engage in a specific behavior, the Theory of Planned Behavior (TPB) is selected as one of the theoretical frameworks to inform the proposed study. TPB examines how a person's attitude, perception of behavior control and value of subjective norms impact the intention and the performance of something, such as physical activity behaviors in the proposed study.

Along with TPB, Identity theory will be used as a key theoretical framework to explore how identity (racial, gender or culture) provides varying views and values about physical activity behaviors. Given the nature of the proposed study's sample population, BFT, which takes two main social locations (race and gender) and explores how they shape various experiences and choices of AA women, is further applied. In this chapter, I will discuss each theory's historical context, previous peer reviewed published literature and their importance to the proposed study. Along with the individual examination of each theory, I will explain the intersectionality and commonalities of all three in relation to this proposed study.

Theory of Planned Behavior

The theory of planned behavior (TPB) was originally penned by Icek Ajzen in 1988 to add to the understanding of behavior intentions from the theory of reasoned action (Fishbein & Ajzen, 1975). TPB is an extension of the theory of reasoned action and is a direct result of a limitation from one of the theory's constructs known as, behavioral intention. TPB purposively examines the intention of an individual to participate in a certain behavior (Ajzen,1991). To measure intention, TPB contains three behavior-centered factors - attitude toward behavior, normative beliefs and

perceived behavioral control. These three factors are said to lead to intent to engage in a specific behavior (Ajzen, 2006). Specifically, TPB suggests that attitudes, subjective norms and perceived behavioral control are traced to corresponding sets of behavior-related beliefs.

Attitudes concerning behavior, also known as behavioral beliefs, within TPB, can represent a favorable or unfavorable attitude toward a respective behavior. These types of behavioral beliefs are developed based on how an individual associates a behavior with certain characteristics, attributes or even previous events. These beliefs ultimately link the distinct behavior to a certain outcome or attribute (Ajzen, 1991). These outcomes or attributes connected to the behavior can be either positive or negative for an individual. The more positive the attitude or behavioral belief is toward a behavior, the more likely the individual will intentionally engage in that behavior (Ajzen, 2006).

Normative beliefs focus on individuals' concern about the likelihood that valuable people in their lives will approve or disapprove of participation in a singular behavior (Ajzen, 1991). This construct also looks at an individual's motivation to comply with the approval or disapproval of the behavior by family, friends, partners and others in society. Normative beliefs translate into subjective norms when an individual's perception of beliefs of important people in their lives interact with their own motivation to comply with those beliefs (Shen, Rinehart-Lee, McCaughtry & Li, 2012).

The final factor in TPB is perceived behavioral control. According to Ajzen (1991), perceived behavioral control plays an important role in TPB and is the determining factor that separates TPB from the theory of reasoned action. Perceived behavioral control considers the lack of volitional elements that are present when attempting to and/or participating in any behaviors (Ajzen, 2002). High levels of perceived behavioral control in relation to a certain behavior is linked

to a stronger intention to perform that behavior. Knowing this, perceived behavioral control can impact behavior indirectly because of its influence on intention as well (Ajzen, 2002). This construct of TPB has been closely tied to perceived self-efficacy (Bandura, 1977). Perceived self-efficacy, according to Bandura (1998), is the belief in one's capabilities to organize and execute the courses of action required to produce given levels of attainments. With this definition, perceived behavioral control and perceived self-efficacy are similar in showing concern with an individual's perceived ability to perform a behavior (Ajzen, 2002).

In recent years, TPB has been further developed into an Integrated Behavioral Model that includes constructs from TPB and from other influential factors (Montano & Kasprzyk, 2015). Specifically, there are two additional influential factors directly affecting behavior - environmental constraints and habit. It is believed that even if a person has a strong behavioral intention, there should be no or few environmental constraints that make behavioral performance difficult or impossible. Also, if experience in performing the behavior make it habitual, it is likely that intention becomes less important in determining behavioral performance for these individuals.

TPB has been used to explore PA in various populations and settings. For example, Shen et al. (2012) used TPB to examine urban AA girls' participation in physical education. The authors found that unfavorable attitudes and lack of perceived support hindered their intentions to participate in physical education in the future. The study also found that a mother's influence (normative belief) and scheduling conflicts (perceived behavioral control) were related to intention for this population. Nigg, Lippke & Maddock (2009), explored the generalizability of TPB across gender, age and ethnicity. In this study, 3,533 participants were recruited to complete surveys and questionnaires regarding demographics, physical activity and psychosocial variables including TPB constructs (attitude, subjective norms and perceived behavioral control). Results from this

study showed that all structural equation models (SEM) had excellent fit with only a few showing small differences. These differences showed that female intention was more highly correlated to behavior compared to male intention. Additionally, in young adults, the influence of subjective norms is less important than in adults over the age of 35 and, in regard to ethnicity, white participants had a lower correlation with subjective norm and behavior compared to Japanese participants. It was determined that TPB is appropriate to use when measuring physical activity across age groups, gender and ethnicity and that the constructs mediate behavior across these demographics.

TPB has also been used in college/university settings to explore PA behaviors. Kwan, Bray & Ginis (2009) explored the constructs of TPB to see if they could predict physical activity behavior in first-year collegiate students. In this study, 212 first-year collegiate students were recruited to participate and provide baseline information pertaining to their PA level and demographics. Participants were given four scales to measure the three constructs of TPB as well as intention. Overall, TPB was useful in predicting intention toward being physically activity but did not predict actual physical activity behavior in first year collegiate students. More specifically, the constructs of TPB made up 37% of the variance in the participants' intention to be active while past behavior does not have an impact on predicting intention or behavior. An email-based PA intervention study was conducted by Parrott, Tennant, Olejnik & Poudevigne (2008) to see if TPB constructs would determine the effects on persuasive messages with sedentary collegiate students. 170 students were placed into three different groups (positively framed messages (PFM), negatively framed messages (NFM) and a control group).

Each group completed baseline measures of TPB and exercise behaviors and started to receive either positive framing email messages, negative framing email message or no emails

regarding PA engagement. Significant statistical results were dependent on baseline data. The positively framed messages (PFM) group had higher exercise behavior scores than both the negatively framed messages (NFM) and control group, higher attitude scores than the control group and higher perceived behavior control scores than the control group and the NFM group. This study found that individuals who previously had a negative attitude toward behavior, did not have a change of attitude after receiving positive framed messages. Subjective norms scores were high and suggested that these collegiate students viewed the opinions of their support network as important.

In a study that explored ethnicity and TPB in collegiate students, Blanchard, Kupperman, Sparling, Nehl, Rhodes, Courneya Baker & Rupp (2008) found that TPB accounted for 72% of variance in intention to exercise for two weeks in AA students and 68% in Caucasian students. At two months, the variance for intention in AA students was 51% and 74% for Caucasian students. The authors also found that in an ethnically diverse collegiate student sample, affective attitude and perceived behavioral control were influential in predicting intention.

In a different study, authors Ajzen and Driver (1992) applied the theory of planned behavior to outdoor recreation leisure choices in students. The results from this study showed that intentions and reported leisure behaviors were predicted with the variables of TPB and that the construct, perceived behavioral control significantly improved prediction of leisure behavior. Martin, McCaughy and Shen (2008) explored the ability of TPB and social cognitive theory to predict moderate-to-vigorous PA in Arab American children. Behavioral beliefs, normative beliefs and perceived behavioral control were assessed in this study; however, the three constructs did not show a significant impact in determining PA participation in Arab American children.

Courneya, Bobick and Schinke (1999) produced a study to explore the relationship between personality and exercise choices using TPB and the five-factor personality model. The authors found that TPB did not have a significant impact as a mediator between exercise choices and personality. Terry and O'Leary (1995) examined the prediction of intentions to engage in exercise using the theory of planned behavior and self-efficacy. The construct, perceived behavioral control, had no control on behavioral intentions but was a significant indicator of actual behavior in this study.

TPB has been used in numerous studies exploring PA with different populations and varying research questions. Considering the above studies, it is clear to see that TPB is valid and appropriate when exploring PA behaviors, particularly in collegiate students and different ethnic groups. This is important for the proposed study because of the goal to measure PA behaviors using TPB in AA collegiate women.

Identity Theory

Identity theory evolved from structural symbolic interactionism (Stryker, 1980), which seeks to understand and explain how social structures affect self and how self affects social behaviors. There are five main concepts of identity penned by Burke (1980) and they are as follows: *Concept (1) Identities are meanings a person attributes to the self as an object in a social situation or social role.* Within this concept, meaning is developed and internalized through interaction with others. Individuals place meaning on their roles by how others respond to them performing that role in social settings. Various responses provide cues to individuals about what is appropriate for that explicit role and identity. In general, words, actions and physical appearance become symbols and produce meanings for identities.

Concept (2) Identities are relational. An individual has multiple identities and each identity is related to the other. An example of this would be a woman who is a mother, wife and doctor. She knows how these three separate roles relate to her identity as well as how each role relates to others (children, husband and patients). In light of this concept, meaning to a person's identity/identities is also contingent on how they relate to counter roles or identities. Also, in this concept is identity salience, which is when a person's various identities are placed in a hierarchy and the identity or identities used most frequently are more dominant in role behaviors and social relationships. Identities such as race, gender and age are constant and usually at the top level of the hierarchy. These types of identities influence an individual's other identities at lower levels of the hierarchy, which are more situation-specific.

Concept (3) Identities are reflexive. Reflexivity of identity is the idea of feedback to self. When an individual practices reflexivity they may adjust role behaviors to fit within their perceived identity and their actual identity. Things such as appearance, gestures, and speech may be altered to align with the perception of others as well as feedback from self. This is also known as someone's image versus actual identity.

Concept (4) Identities are a source of motivation. Identity acts as a motive because it calls for certain actions from an individual when present in different spaces. These actions are also based on the meaning of an individual's identity. An example of this is gender identity, where an individual may perform certain actions based on what they believe it means to be a "woman" or a "man". This also relates to the perceived social location that an individual has, does the individual operate as a "typical woman" or as the "stereotypical woman". The personal concept of gender identity evokes certain characteristics/behaviors.

Concept (5) Identities operate indirectly. This concept states that identity influences role behavior through the construction of self-images and self-images directly influence role performance. The link between identity and self-image is that self-image is subject to change or editing constantly, while identity does not change. Burke (1980) defines image as a working copy of identity. Self-image is linked to performance because image acts as a working model for constructing performance within a situation. Performance is then considered to be the externalization of an individual's image. Along with the five concepts, there are three main uses for identity theory that are explored. Identity can be used to refer to the culture of people, common identification within a social category (social identity theory) and to reference parts of self that are composed of the meanings that individuals attach to multiple roles they play in society (Styker & Burke, 2000). The last use for identity will be explored in this chapter and the proposed study.

Considering the population of the proposed study, exploring racial identity specifically is important. White and Burke (1987) suggests that ethnic identity reflects what it means to be a part of a certain ethnicity. The authors also propose that trait differences, stereotypes and social conventions serve as symbols and shared perceptions that are the basis to ethnic identity. In the same study, White and Burke (1987) recruited 73 AA collegiate students and 139 Caucasian students from a Midwestern university to help produce an ethnic identity measurement. The authors explored how three main areas of identity (ethnic identity salience, commitment and self-esteem) impact ethnic identity. Ethnic identity salience is defined as the importance of the ethnic identity to the important people around an individual, ethnic role/group commitment is defined as extensiveness and intensiveness of a role, position or identity. To measure this factor, participants were asked "how many people they knew as a result of their ethnic identity" (extensiveness) and "how many friends/close friends are a function of their ethnic identity" (intensiveness). The final

measurement explored self-esteem, but the authors did not have a measurement that specifically looked at self-esteem and ethnic identity, so they used a general self-esteem model.

White and Burke (1987) found a small but significant relationship between ethnic identity and salience. The relationship suggests that persons with more “black” identity had lower ethnic identity salience. There was no significant relationship between self-esteem and ethnic identity, but there was data that showed participants with black identity knew fewer people because of their ethnic identity and that the higher the commitment (extensiveness and intensiveness) the higher the level of ethnic identity salience. One of the most important findings from this study was the discovery of “black pride”. In this study, the authors found that the participants who were committed to their black identity had higher self-esteem and were more likely to be involved with others who felt the same. White and Burke (1987) found that “black pride” resulted in a positive self-identity and suggests that negative images and stereotypes portrayed by the dominant group (Caucasian) was not internalized or accepted by the minority group (AA).

Years after the work of Burke (1980) and his identity theory, William Cross produced literature exploring black racial identity (1991, 1995). Cross (1995) gives a detailed account of how AA identity was developed through a model called “Nigrescence,” which is the process that AAs experience to re-socialize themselves to be more Afrocentric and not Eurocentric (Cross, 1995). This model has been used to better understand how AA racial identity was developed and includes four stages: pre-encounter, encounter, immersion-emersion, and internalization, mentioned in chapter one. The pre-encounter stage is the phase where an individual has an attitude that is neutral-to-negative toward being AA. During this phase, a person may know they are of AA descent but will not identify with the cultural norms or perform any roles within the group. They may identify more with the Eurocentric culture.

The encounter stage is the phase where an individual will experience some circumstance or event that will change their view of the world or the structured settings around them. In this stage, one could experience overt racism or discrimination from individuals who are part of the same group with which they were trying to build identification ties. Immersion-emersion takes place when an individual begins to separate themselves from one identify and picks up their new identity. In this case, an AA may begin to present themselves as an AA by wearing their hair a certain way or changing their social setting to match their new identity. The final stage which is internalization happens when the individual has accepted their identity as an AA and no longer struggles to fit in or expresses anger toward others in other racial groups. Ultimately, they found harmony and have accepted their roles and actions within their group/setting.

From this body of work, new researchers began to explore racial identity and its impact on the AA community. In education, Parham and Helms (1981) explored black collegiate students' racial identity attitudes and their preferences for black and white counselors using the cross model, Nigrescence. The authors hypothesized that individuals in the pre-encounter phase would prefer a white counselor and reject black counselors. Those in the encounter phase would prefer AA counselors and reject Caucasian counselors and those in the immersion-emersion phases would be expected to have a more positive preference for AA counsels. Participants in the final phase, known as internalization would be expected to prefer both Caucasian or AA counselors but the preference for a Caucasian counselor would not be as strong as those in the pre-encounter phase.

Participants in this study consisted of 54 AA students from a large rural state university enrolled in an introductory psychology class and 38 AA students from a large urban private university enrolled in an introduction to black history course. The ages of all participants ranged from 17-25 years old. The racial identity scale, the counselor preference scale and a demographic

questionnaire were used to collect data from all participants involved. Using multiple regression analysis, the authors found that black students in the pre-encounter phase preferred white counselors, while those in the encounter and immersion/emersion stages preferred black counselors. Results showed no significant relationship between the internalization phase and choice of counselor. Parham and Helms (1981) state that, at the final stage (internalization), a person is more comfortable with their racial identity; therefore, the race of a counselor becomes less important and other qualities such as skill level and racial attitude take precedent in choosing a counselor.

In sports and PA Harrison, Lee & Belcher (1999) assessed students' beliefs about the sources of their defined competence and motivation to participate in movement activities (sports/PA) and determine if these sources differ as a function of race, gender and socioeconomic status (SES). This was a two-part study that began with 400 middle and high school students given the Reasons Why I'm Good at Physical Activities Questionnaire. A factor analysis was conducted using the data from the questionnaires and resulted in four stable factors. 1). TV/Modeling, 2). Expectations, 3). Parental Influence and 4). Effort. TV/Modeling asked how participants viewed sports and sport models on TV and in their immediate environment; Expectations were directly related to the expectations of the participant's ability to perform a sport or PA from their teachers, coaches and friends. Parental influence was the level of influence a parent had on the participant's performance in a sport or PA and the final factor, effort, measured the extent to which participants attributed effort to their success in sports/PA.

In the final part of the study, 168 seventh- and eighth-grade students were recruited from the same middle/high school used in part one. Demographic information such as age, gender, race and parent education and occupation (for socioeconomic measurement) were collected along with

their answers for the four factors in part one of the study. A confirmatory analysis and a 2x2x4 MANOVA was performed to assess racial, gender and SES differences among all four factors. Results from part two of the study found that on Factor 1 (TV/Modeling) AAs scored higher than European Americans and males scored higher than females on items referring to the influence TV/Modeling has on their feelings of competence in performing a sport/PA. Factor 2 (Expectations) showed that the expectations of teachers, coaches and peers were more influential on the perception of ability in sport and PA in males than females and parental influence (Factor 3) was higher among AA males and European-American females. On the final factor, effort, females scored higher than males suggesting that effort is directly related to success in sports and PA engagement for this group. Overall, the results from this study suggest that both race and gender have an influence on participation and perception of sports and physical activity in youth.

To discuss both gender and racial identity Beverly Daniel Tatum explores the struggles AA girls encounter in an all-Caucasian community using the cross model (1991,1995). Tatum (1997) states that AA women cannot isolate their blackness from their femaleness. This means that at all times an AA woman will always be both AA and a female and, with both of those classifications, a unique experience takes place. In her book chapter titled “Racial identity development and relational theory: The case of black women in white communities,” Tatum (1997) seeks to explain how the intersection of race and gender impact a group of young AA women who grew up in predominantly Caucasian communities through qualitative interviews.

In her research the author uses the cross model (1995) for defining racial identity and its stages. In this study, Tatum (1997) explores how early relationships between AA adolescents and the dominant group create a relational connection between racial identity and progress through the various stages. As young children most AA adolescents have their first relationships with the

dominant group in a school setting, a teacher or a classmate that becomes a friend. During this relationship, the adolescent may begin having desires to be a part of the dominant race and reject their own racial identity (pre-encounter). However, once the adolescent begins to mature and grow older, certain events or social rejection may take place that will lead them to the encounter phase.

A young girl describes her social rejection experience in this study as follows:

“she introduced me to somebody and her friend gave her a look like ‘I can’t believe you have a black friend.’ And I remember that one friend saying, ‘She’s not really black, she just went to Florida and got a really dark tan.’ And that upset me incredibly because it was like, “What!?! Yes, I am, wait a second here.”

For some, the acts of social rejection may not be as overt but may come as minor things such as not being invited to parties or dances, not being introduced to family members or other friends, etc. These types of experiences force young AA women out of the pre-encounter phase and into the encounter phase Tatum (1997). While most may move into the encounter phase, some choose to deny any perception of racism for fear of “condemned isolation” if they choose to move away from the friends and community they’ve only known. In condemned isolation, the person recognizes they no longer fit into the “in racial group” but, out of fear of being alone, they try to ignore the very thing that makes them an outsider, race. This was described by one young woman in the study as follows:

“I really didn’t see my blackness in high school at all. I mean I was aware of how I was treated differently, but for so long my mom was always saying ‘you think you’re white. You think you’re white. You think you’re white’. [Her reply] “No mom, we don’t see color here. Everyone is friends and they treat me the same. I couldn’t see then what she was trying to point out to me.”

From this experience, the same young woman decided to go to an historically black college/university to fulfill her desire to become a part of an all-AA community. This, as the author explains it, is the act of immersion and disengaging from non-mutual relationships, which can be destructive. Tatum (1997) describes the immersion stage as an opportunity for young AA women to have their own experiences validated by the shared experience of other young AA women. This relationship that forms in the immersion phase provides a positive redefinition of racial identity and empowers the young AA woman by allowing them opportunities to develop relationships with other young AA women that were not present growing up in predominantly Caucasian communities. Because of the empowerment and redefinition of racial identity, the young AA women in this study were on their way to the internalization phase. One young AA woman described her experience with immersion and internalization during college:

“one of my best friends on this campus is black and she is very aware of her black identity. And it’s been a great help for me because it makes me look at it and be just as proud as she is of my black heritage, of my black identity, and be vocal about it. Whereas I was never vocal, but now I can be.”

This young AA woman was able to find friendship with another young AA woman who did not share her same experience growing up in a predominantly Caucasian community but who shared her experience of being devalued and invisible as AA women in society. By forming these relationships with other young AA women, the information shared, and survival strategies given provide an environment where these young women feel heard, understood and seen (Tatum, 1997). To further explore how race and gender impact AA women in society, the Black Feminist Thought, authored by Patricia Hill-Collins, will be discussed and used as a theoretical framework to inform the proposed study.

Black Feminist Thought

One of the most notable authors on the intersectionality of gender and race for AA women is Patricia Hill-Collins. BFT, as discussed by Hill-Collins (1986) seeks to bring forth ideas produced by AA women that clarify a perspective of and for black women. With this purpose, the author lists assumptions related to the definition of black feminist. BFT uncovers that AA women have a unique point of view on their experiences and certain commonalities of these experiences will be shared by AA women as a group. Along with this assumption it is also clear that there is diversity among AA women based on age, sexuality, class and other social locations that will shape the expression of these shared themes by the individual.

With the definition and the outlined assumptions Hill-Collins (1986), defines three important themes regarding documentation and interpretation of BFT by AA women. The first theme includes self-definition and self-valuation. Self-definition is the challenging of externally-defined, stereotypical images of AA womanhood. Self-valuation is producing new context of authentic images of AA females as an expression of self-defining. These externally-defined stereotypes, based on the dominate group's perception, have been used to dehumanize and control AA women. Hill-Collins (1986), goes further to state that when AA women define themselves by rejecting what has been said about them, they begin to question the credibility and intent of those in power who set out to define them as a whole.

The second theme is known as “the interlocking nature of oppression”, which discusses the importance that the intersection of race, gender and even class have on oppression in AA women. Hill-Collins (1986) suggests that while AA women can minimize one form of oppression, they are still vulnerable to experiencing oppression in another equally-dehumanizing form. For AA women, according to the author, they are unable to negate female subordination because they are not

Caucasian, and they cannot be free of the stigma associated with being AA because they lack the dominate appeal of manhood/masculinity. The intersection of race and gender ultimately leaves black women as an invisible population that remain oppressed because of their status as women and black.

The last theme mentioned is the importance of AA culture. This theme is based on black women redefining and explaining the importance of black women's culture. Culture for black women has been expressed through various mediums and has historically been passed down through oral, written and even behavioral expressions. The culture of AA women is not static; it does not stop. Culture and its themes evolve and are expanded due to historical settings, age, sexuality, class and location of black women. Therefore, culture is a collection of AA women's culture across time and social locations. Although culture evolves, few expressions within the AA women's culture stay consistent. These consistent traditions within the culture is sisterhood or the interpersonal relationship among AA women, the interpersonal relationship between black women and their children (biological, extended family and community). The final staple in AA women's culture is the expression of self-value and self-definition. Examples of these are hairstyles, clothing, music, poems/books, movies/plays, and participation in social movements/social justice. The various ways of expression offer a certain freedom from the oppression, objectification, and invisibility placed on AA women due to the intersection of gender and race within this population.

Studies that focus on AA women and sport/physical activity engagement are scarce. The proposed study will be one of few that intentionally apply the BFT as a theoretical framework to explore physical activity engagement in AA collegiate women. The use of this theoretical framework ties together all of the above-mentioned theories, providing a holistic approach to the proposed study. BFT explores identity from both a racial and gender perspective as well as

including some of the constructs of TPB (attitude norms, perceived behavioral control and subjective norms) based on the social locations of the sample population.

The intersectionality of race and gender, as discussed in previous paragraphs is such a crucial perspective that it needs to be explored more in various settings. Using the BFT framework to inform my research is a necessity because my targeted sample will undoubtedly have unique standpoints and experiences regarding PA due to their status as women and as AA women. As previous studies have shown there is a lack of representation of AA women in the literature exploring PA participation in collegiate women. The choice to use BFT in conjunction with the theory of planned behavior is based upon the intersectionality of both frameworks.

BFT and TPB were selected for this study because they best answer the research questions. More importantly, they are complementary and mutually supportive of one another. BFT seeks to provide definitions or meanings of culture through the eyes of AA women from different social locations. BFT also provides a platform for AA women to express their attitudes and personal experiences that have informed their decisions to engage in various activities. At the same time, TPB looks to determine how attitude beliefs impact an individual's intention to participate in a certain behavior.

While the theory of planned behavior does not evaluate culture explicitly, normative beliefs and the influence of valuable people in an individual's life can be cultural specific. Finally, BFT allows AA women to define themselves and accept or reject portrayal of their likeness in society. Perceived behavior controls, the final construct in TPB is the individual's perception of their ability to perform a certain behavior. This construct can ultimately solidify how the combination of all three aspects of BFT influence an AA woman's decision to complete a specific action.

CHAPTER 3: METHODOLOGY

Given the purpose of the study, this chapter was designed to discuss and describe the research methodology that was used. The following criteria will be discussed: research setting and participants, research design, variables and measures, data analyses and researcher subjectivity.

Research Setting and Participants

The study took place at a major university located in a Midwestern state in the USA. The research setting was chosen because the university is located in a large urban city and its self-proclaimed title of being an “urban university with a diverse campus.” In the fall of 2016, this university enrolled 27,326 students with 17,280 being undergraduates. Out of the 17,280 undergraduate students, 71% were between the ages of 18-24 years old, 9,596 were female and 2,976 (17.2%) were AA.

Participants were recruited over the length of two college semesters (Winter 2017 and Fall 2017). A total of 131 surveys were gathered during data collection, however after careful data screening and cleaning, a final number of 97 completed surveys were used to complete the quantitative data analysis. Criteria for participation was as follows: 1). Identify as an AA woman, 2). Undergraduate standing with the university, and 3). No affiliation with any collegiate sport or intramural team, 4.) Not currently enrolled in a Lifetime Fitness Activity Course.

Demographics of Participants

The participants of this study all identified as AA women and were all pursuing an undergraduate bachelor’s degree, majored in Liberal Arts and Sciences, Business, Fine, Performing and Communication Arts, education, nursing, engineering, social studies, and others. Participants’ age ranged from 17-65 with many of the women between the ages of 18-24. The average age was 31 but 18 was the most frequently recorded age. 69 out of the 97 participants

held an upperclassman (junior/senior) status with the majority of all participants being full time students. Over half of the participants lived off campus and held employment. Of those that were employed most of the participants had part-time jobs. Full frequency results are in table 1.

Table 1: Participant Demographic Frequency chart

Variable	Frequency	Percentage
Age		
17-24	47	48.5
25-32	14	14.4
33-40	13	13.4
41-49	12	12.4
50+	11	11.3
Total	97	100%
Campus Living		
Yes	40	41.2%
No	57	58.8%
Total	97	100%
Student Status		
Full-time undergraduate	62	63.9%
Part-time undergraduate	35	36.1%
Total	97	100%
Class Standing		
Freshman	15	15.5%
Sophomore	13	13.4%
Junior	36	37.1%
Senior	33	34%
Total	97	100%
Employment		
Unemployed	18	18.6%
Part-time	48	49.4%

Full-time	31	32%
Total	97	100%

Research Design

The study was a mixed methods design, with qualitative and quantitative research methods. The qualitative component was used to support and complement the quantitative procedures. The two components are equally important to the study's objectives. Compared to a single method design, mixed methods can strengthen data structure and enhance the depth and breadth of analyzing research questions (Johnson & Onwuegbuzie, 2004). The decision to implement a mixed qualitative-quantitative methods study was based on the varying epistemologies and ontologies that are associated with both methods. These assumptions that are associated with the separate methods ultimately influenced the questions I asked, the method of data collection and my role as a researcher.

Quantitative research has been linked with positivism, which says that the knowable and predictable reality exists independent of the research process (Hesse-Biber & Leavy, 2011). This ontology allows the researcher to conduct the research based on the assumption that the object(s) and/or the relationship between the objects being study is separated, unrelated and unchanged by the researcher. The researcher who uses quantitative research believes that there is a structural external reality and will seek to find logical patterns and theories to explain or predict casual relationships (Hathaway, 1995). The research process, also known as deductive, begins with a pre-planned research question that will explore previously selected categories and their relationships to each other (Hathaway, 1995). In quantitative research, the researcher and the researched are a part of a dichotomous model (Hesse-Biber & Leavy, 2011). The researcher is considered the knower in this model and the object is what is knowable, maintaining the separation of the

researcher and the researched. The aim of inquiry for quantitative research is to provide universally applicable results about phenomena (Hathaway, 1995).

This study used quantitative research because previous literature showed that there is a relationship between psychosocial factors and PA participation. These objects and their relationships to one another exist within a social reality. As the researcher, I explored the relationships of these variables and others, to find patterns that could help predict or explain PA participation in this population. My aim of inquiry was to provide results that would be generalizable to this population.

Qualitative research's ontology is based on the reality lived by those participating in it (Hathaway, 1995). Unlike quantitative researchers, qualitative researchers do not detach themselves from the researched. The underlying assumption of qualitative research is understanding the participants' perspectives and how they interpret their lived reality. Reality in qualitative research is constructed and understood differently for each individual (Hathaway, 1995). Qualitative researchers become active participants in the reality of those being studied and they can do this by observations, interviews and ethnography (Hesse-Biber & Leavy, 2011). The epistemology of qualitative research is drastically different than quantitative research. Knowledge, according to Hathaway (1995), is connected to the participants' definition and perspective of the situation. The researcher must have knowledge of the entire context (people, culture, previous events, etc.) of what they are studying. The aim of inquiry for qualitative research is to not generalize any results globally but to provide insight into specific settings/phenomena that are a part of the research study.

This study used qualitative research because the lived experiences, unique perspectives and meaning of PA of the participants are important and valuable to fully understanding how to better

serve this population. I could not gain this knowledge without using qualitative methods and the inductive process. My personal experiences allowed me to have a certain level of understanding of the overall context of this study, which is different from the quantitative research. My aim of inquiry for this particular aspect of this study was to gain specific details regarding the participation and perception of physical activity at this University by AA collegiate women.

Historically, most scholars have engaged in either quantitative or qualitative research. According to Babbie (2007), a quantitative analysis is the numerical representation and manipulation of observations for describing and explaining the phenomena that those observations reflect. Quantitative methods include measurements or numbers that have calculable meaning (GPA, test scores, etc.). Quantitative data collection can take place in the form of surveys, experiments and meta-analysis. A quantitative analysis will use prediction and a deductive approach to confirm a theory/phenomenon.

In contrast, qualitative research uses other forms of data collection like in-depth interviews, focus groups, ethnography, content analysis and oral history. Qualitative research uses an inductive approach to answer how, why or what of a specific phenomenon (Hesse-Biber & Leavy, 2011). The goal is to explore the subjective social meanings of the lived experiences and perceptions of individuals. There are three main types of approaches in qualitative research. Exploratory studies look at topics that have little to no published literature. The main point of this type of research is to learn more about a certain topic to help inform future research in the same area. Descriptive studies define the experiences of a certain population or sample. Explanatory studies seek to illuminate relationships between two subjects (e.g., race and PA) (Hesse-Biber & Leavy, 2011). Whereas quantitative research intends to confirm theory, qualitative research aims to build theory, often referred to as the grounded theory approach.

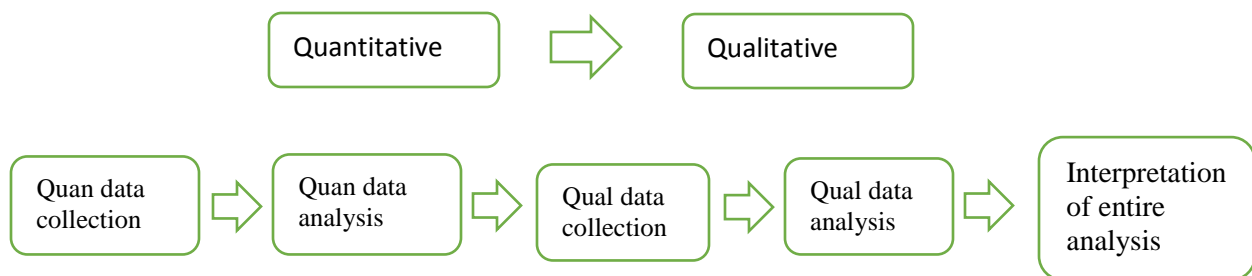
Quantitative and qualitative research methods both bring valuable and credible data to the research field. While they have been used separately for decades, in more recent years, researchers have begun to use them both within the same research study. This approach is known as mixed methods. Johnson, Onwuegbie and Tirner (2007) define mixed research as a synthesis that includes ideas from qualitative and quantitative research. The mixed methods approach has been defined and developed over the past 20 years (Johnson et al, 2007; Creswell & Clark 2003; Creswell, Tashakkorik, Jensen & Shapley, 2003; and Greene, Caracelli & Graham, 1989) and has emerged as a third major research paradigm (Johnson et al, 2007). Denscombe (2008) provided characteristics of the mixed methods approach and suggested that any research using this approach should include the following: 1). Quantitative and qualitative methods in the same research study; 2). The research design should clearly state the sequence and the importance for each quantitative and qualitative element of the data collection and analysis; and 3). An account of how both the quantitative and qualitative research methods relate to one another and how triangulation and pragmatism have been used.

Quantitative and qualitative methods were used for this study. The quantitative surveys were used to explore PA levels, behavior beliefs and environmental factors that influence PA in AA collegiate women. In addition to the quantitative surveys, ten focus groups were conducted for the qualitative methods in this study. The timing of the data collection for both methods was sequential, and data collection for both methods took place in phases (Creswell, 2009). The first phase was quantitative and took place over 8 weeks in a full college semester (15 weeks). The final phase of data collection was qualitative and in the form of focus groups. Focus groups took place immediately after quantitative data was completed and was completed in 5 weeks over the length of two semesters. Research methods were connected and embedded with one another and focus

group recruitment was directly connected to the quantitative surveys/demographic information obtained during phase one.

To participate in a focus group, individuals had to complete the quantitative surveys and they were chosen based on specific quantitative measures (PA level, age, housing, etc.). Creswell (2009) states that, to have embedded data, a secondary database is used to support the findings of a primary database in a study. The study used the qualitative database from the focus groups to support and better explain the findings from the quantitative data (primary). Both data collection methods used theoretical frameworks to guide the researcher. An interpretive and critical approach was used for all qualitative methods, while an integration of the theory of planned behavior and BFT informed the quantitative phase of the study. Below is a visual that explains the timing and mixing of content for the study, adopted from Creswell (2010).

Figure 1: Sequential Explanatory Design



Continuing with the main structures of a mixed methods research study, I defined triangulation using the Campbell and Fiske (1959) explanation. Campbell and Fiske (1959) refer to triangulation as using more than one method as part of a validation process that ensures the explained variance is the result of the underlying phenomenon or trait. When exploring triangulation, there are four types of methods that can be used in research. Denzin (1978) lists the following: 1). Data triangulation (using more than one source to collect data in a study); 2). Investigator triangulation (using more than one researcher for a study); 3). Theory triangulation (using multiple theories to interpret results from a study); and 4). Methodological triangulation (use of multiple methods to explore a research question). In this study, I used a methodological triangulation to explore the proposed research questions. Using a methodological triangulation approach provided validation of the results because they were analyzed using more than one method. Methodological triangulation minimizes the limitations associated with each research method because, where one research method may lack, the use of another will suffice, giving a comprehensive approach to the research question.

Pragmatism is the philosophical partner for the mixed methods approach and provides the researcher with a set of assumptions that separates this approach from quantitative and qualitative (Denscombe, 2008). The four assumptions for the mixed methods approach are not exclusive from one another and more than one may be used by a researcher according to Denscombe (2008). The four assumptions are as follows: 1). pragmatism provides a fusion of approaches (provides a common ground for quantitative and qualitative approaches); 2). pragmatism provides a basis for using mixed methods as a third option for researchers who believe that neither quantitative or qualitative research will provide adequate findings for their research question; 3). Pragmatism is perceived as a new orthodoxy, where using mixed methods is allowable and desirable to produce

adequate answers to research; and 4). Pragmatism is “expedient” or an approach where “anything goes” (Denscombe, 2008). This study followed the pragmatism assumptions that fused both quantitative and qualitative methods and provides more adequate and in-depth results. The fusion provided a more comprehensive approach and showed how these methods can coexist in a research study. Also, by using both methods, the results captured statistical significance and social understanding of the research question.

Greene, Caracelli and Graham (1989) produced a research study that thoroughly discussed mixed methods evaluation design. There are five purposes of research design using a mixed methods approach, which are as follows: triangulation, complementarity, development, initiation and expansion. For this study, I used complementarity, described as seeking elaboration, enhancement, illustration or clarification of the results from one method with the results from the other method (Greene, Caracelli & Graham, 1989). Complimentary is directly related to the second assumption about pragmatism and when to choose a mixed methods approach. The use of the mixed methods approach is important because previous published research on PA in AA collegiate women and collegiate students in general have only used a single methodology, producing results that may not show the entire picture or true clarification of the problem.

Recruitment

Once approval was granted from the University’s Institutional Review Board (IRB), participants were recruited from a university wide approach. Flyers (made specifically for this study), face-to-face solicitation and email blasts were used to reach all potential participants. Flyers were placed in academic, housing and administrative buildings throughout the University’s campus. Flyers included a brief overview of the study, provided key contact information for the principal investigator. Flyers also provided a QR code for potential participants to scan and

complete the survey at their own convenience from their phone. The university's online portal, known as *Academica*, was used as a social media recruiting tool for the study. *Academica* is an online portal that can be accessed by current students, staff and faculty on a variety of electronic devices (computers, smartphones, tablets, etc.). Details about the study were posted on the portal to the entire undergraduate population, specific subscribers (minority student organizations, specific colleges and academic programs, etc.).

This form of recruitment made it easy to access those in my population who were not on campus to see the flyers or to meet me face-to-face. As the principal investigator, I spent an ample amount of time on campus recruiting participants by verbally soliciting students in campus dining areas, campus study areas, educational classroom settings, and at leisure activities such as athletic games and intramural sport competitions. To gain as many participants as possible, I set up tables at the student center for a full week at different times during the day (morning, afternoon and evening). Participants were able to complete the surveys immediately. For women who wanted to participate but did not have access to their phones or computers, I asked them to leave their name, telephone number and email address for contact later.

After obtaining initial contact information, emails were sent to the potential participants. Included in the email was an overview of the study and a personalized hyperlink that gave participants access to the online survey. The survey was administered using Qualtrics Survey Software (Snow & Mann, 2013), which provides researchers with tools that help to reduce missing data, and track participant responses and follow-up with those who have not yet responded. In addition to the initial email, those to whom the survey was given received three reminder emails inviting them to complete the survey. This was done to help ensure study participation. I used multiple mediums of recruitment to increase the odds of participation from my targeted population.

Quantitative Data

The quantitative data was collected in one wave. During the data collection, participants' weekly PA participation, their perceived environmental condition, and TPB variables (i.e., intention, attitude, subjective norms, and perceived behavioral control) for PA participation was measured using the following validated instruments.

Measures

Demographic information. Demographics were recorded for everyone and addressed the following: gender, race, age, current employment status, marriage status, parental status, class standing, current degree major, housing arrangements (on or off campus), commuter miles/time, current PA routine and whether they considered themselves as physically active.

PA participation. AA women reported their PA levels using The International PA Questionnaire (IPAQ). The IPAQ was created in 1998 by a group of established PA researchers at a World Health Organization conference in Geneva, Switzerland (Craig, Marshall, Sjostrom, Bauman, Booth, Ainsworth, Pratt, Ekelund, Yngve, Sallis and Oja, 2003). The purpose of the creation of IPAQ was to present a measure that could be used globally (unlike most PA measures at the current time) and to measure PA in various settings such as work, home and leisure (Bauman, Ainsworth, Bull, Craig, Hagstomer, Sallis, Pratt, Sjostrom, 2009). During initial testing and development, the IPAQ consisted of four short versions and four long versions (Craig et al, 2003); however, there are currently only two versions of the IPAQ (one short and one long) to address PA. When deciding to use IPAQ, researchers should first determine how they will assess PA. The short version is recommended if it is being used to assess PA on a large scale (regionally, nationally) and the long version of the IPAQ should be used by researchers who would like to gain more detail about individuals' PA (Bauman et al, 2009). Both versions explore PA over a seven-

day period and can be found in several languages. The IPAQ provides guidelines for users to classify participant's activity level as low, moderate or high, as well as ways to navigate issues of missing data, proper scoring and extreme values (IPAQ Research Committee, 2005)).

The long version of the IPAQ was used to obtain detailed information regarding the PA of AA collegiate women. Twenty-seven items appear on the long version of the IPAQ and are divided into the following sections: work-related PA, transportation PA, Domestic chores PA, moderate and vigorous leisure PA, walking for leisure PA and time spent sitting. Craig et al (2003), found the IPAQ to be reliable and valid for use in 12 different countries, including the USA. In this study, the reliability assessment of test-retest was implemented with the IPAQ administered twice within an eight-day period. Overall, the reliability for IPAQ was $r=0.81$. In the USA, the long form IPAQ version was $r=0.83$ with a N of 904 participants. Additional sections of the USA IPAQ long version results are as follows: a total PA reliability of $r=.91$, job related reliability for the long version was $r=.84$ and sitting time reliability was $r=.93$. The reliability of the IPAQ, both long and short, has been tested in other studies and has been found to be reliable in various versions internationally (Van Poppel, Chinapaw, Mokkink, Van Mechelen, Terwee, 2010, Bauman et al, 2009).

The IPAQ presents three different options for reporting data. Researchers can use duration or minutes spent engaging in a PA domain, frequency or days spent engaging in PA and lastly, MET-minute per week for each specific PA analyzed. In this study, MET-minutes scores are reported to show the intensity level of the physical activities participants were engaged in. MET, which stands for Metabolic Equivalent, is used as a common measurement to understand the amount of energy expended during a physical activity. One MET is the same amount of energy expended while resting, also referred to as the resting metabolic rate (Jette, Sidney & Blümchen, 1990). IPAQ uses specific METs to represent the different types of PA. Walking as a physical

activity is measured at 3.3 Mets, moderate physical activities are at 4 METS and vigorous PA are 8 METS (IPAQ Research Committee, 2005). It is important to note that the MET units used for calculation and scoring are specific to the IPAQ only. To properly calculate the MET-minute per week score IPAQ provides the following formula: METs*minutes* days. For example, to calculate the leisure walking METs for a participant who spent 20 minutes walking for 4 days over the last week it would look like this: $3.3*20*4$ with the total leisure walking METs being 264 for the week.

The Theory of Planned Behavior. The four major theoretical constructs in TPB – intention to participate in PA, attitude toward PA participation, subjective norms, and perceived control over participation in PA – was assessed using a TPB scale. This scale was designed based on guidelines provided by Ajzen (2004) and previous TPB research in PA with similar aged participants. Intention to participate in PA was assessed through three items on a 5-point Likert scale, using the anchors “disagree or agree.” Participants indicated to what extent they expect to, intend to, and would try to participate in PA during the given semester. Attitude was assessed through three items on a 5-point scale. Participants responded to three sets of anchors for the question “Participation in PA will be...” To assess the experiential aspect of attitudes, one question of which is anchored with “unpleasant” and “pleasant.” The opposing anchors of “useless” and “useful” was used to measure the instrumental, or functional, component of participant attitudes. Finally, to obtain a global assessment, the anchors of “bad” and “good” were used (Ajzen, 2004).

Subjective norms were measured through three items with respect to participating in PA in a semester. Respondents were asked to indicate, on 5-point unlikely-likely scales, the extent to which they believe that most people who are important to them (i.e., family members and friends) think they should participate in PA, would be disappointed if they did not participate in PA, and expect them to participate in PA in during the semester. Finally, perceived behavioral control was

assessed using the following four items: “I have complete control over participating in PA” (disagree-agree), “I can overcome any obstacles or problems that could prevent me from participating in PA if I want to” (disagree-agree), “It is mostly up to me whether or not I participate in PA” (disagree-agree), and “For me to participate in PA in this semester will be” (easy-difficult).

Perception of Environmental Condition: Environmental barriers was measured through an adapted PA Neighborhood Environment Scale (PANES), which highlights PA-related environmental factors in both school and home settings. The PANES was developed to measure environmental attributes associated with PA for an international prevalence study of PA (Sallis, Kerr, Carlson, Norman, Saelens, Durant & Ainsworth, 2010). The self-report scale consists of 17 items with the main sections being 1). residential density, 2). land use mix, 3). street connectivity, 4). proximity to neighborhood recreational facilities, 5). pedestrian infrastructure, 6). bicycling infrastructure, 7). aesthetic quality, 8). social cues for PA, 9). traffic safety, 10). crime safety and 11). access to an automobile. Each item is written as a statement with responses listed as strongly disagree (1) to strongly agree (4). For scoring purposes, the higher the total score, the more “walkable” the neighborhood of the participant. Neighborhood is defined as the area within 10-15 minutes from a participant’s home. For the study, we kept the same definition of “neighborhood” but identified it to the participant’s current housing status (on campus or off campus). Through previously published literature, the PANES has been validated and proved to be reliable in different countries, including the USA (Sallis et al, 2010, Alexander, Bergman, Hagstromer & Sjostrom, 2006, Brownson, Hoehner, Brenman, Cook, Elliot & McMullen, 2004, Oyeyemi, Adegoke, Oyeyemi & Fatadumi, 2008).

Data Analyses

The information in the following paragraph is based on the statistical program SPSS. When conducting data analysis, the first few steps are common regardless of the statistical analysis used. When inputting data, the first step was data screening, which ensures your data file is free of missing values and is correctly coded. Each quantitative survey and demographic document was coded for analyses in SPSS. Reliability of the questionnaire data was then examined using coefficient alphas for internal consistency.

To address *the first* research aim, I conducted a descriptive analysis to explore overall PA involvement of AA collegiate women. To address *the second* aim, a hierarchical regression analysis predicting AA collegiate women's overall PA involvement was conducted. Specifically, demographic variables (i.e., age, employment status, campus living status, class standing) were entered first to control their influence, followed by intention, and then TPB variables (i.e., attitude, subjective norms, and perceived control) and perceived environmental condition in separate blocks.

In the regression analysis, each variable was individually evaluated or weighted. the variance of physical activity at the beginning of the regression model was completely (100%) unaccounted for. However, once all predictor variables were placed into the equation, each one carried its own amount of variance to explain physical activity in the model. The effectiveness of the overall model is determined by the value of R^2 . Cohen (1988) suggests that the following values represent small, medium and large effect respectively; .10, .25, .40.

Qualitative Data

To address *the third* aim of this study, I conducted ten qualitative focus group interviews to examine the primary influential factors and underlying cognitive and affective foundations for

AA collegiate women's PA participation. The qualitative research methods in this study were guided by both the interpretive and critical approaches. In this section, the theoretical assumptions for both approaches are briefly discussed.

Theoretical Assumptions

The interpretive approach focuses on understanding, interpretation and social meaning and ultimately views "meaning" as being constructed through interaction between humans and/or between humans and objects (Hesse-Biber & Leavy, 2011). With this approach, an individual's reality is based upon social locations, cultural influence and how the two impact various experiences in their lives (Patton, 2002). It was important for me to use the interpretive approach because it places value on lived experiences and perspectives and creates a critical source of knowledge (Hesse-Biber, Leavy, 2011). It is also connected with my overall research question.

Due to human interaction and rituals, the philosophical belief of social reality (ontology) with interpretive research is unpredictable, continually evolving and always under construction (Hesse-Biber, Leavy, 2011). An interpretivist's assumption about what it means to know and understand is grounded in the interaction between the researcher and the researched. The knowledge gained is not based on the researcher's interpretation alone but the constant exchange of information between the participant and the researcher. Ultimately, the researcher will interpret the way the individual interprets their lived reality. In this study, as the researcher, my knowledge was based on the lived experiences the participants shared with me regarding PA, racial identity and other factors exclusive to them. It was then up to me to interpret these meanings and present them in the form of themes and unique perspectives.

The critical view approach was chosen for this research based on both the race and gender of my population, as well as my own background. The critical approach used evolved from the

social injustice movements, specifically women's rights and civil rights movements. This approach was important because it dissects how a dominant ideology, and/or dominant culture, influence the way standards, rules and mandates in society are set, and how they affect those in the minority (Hesse-Biber & Leavy, 2011). AA women fall into two historically oppressed groups; through the critical approach, I discovered and communicated their unique perspective as both a woman and an AA to a large audience. The ontology (reality) of the critical approach is a combination of the historical conditions of social, political and cultural locations of a population (Merriman, 2009).

This was extremely fitting for exploring how the reality of AA has been shaped based off the aforementioned locations and doing so in their own words. Like the interpretive approach, knowledge according to the critical approach has been created over time and is not stagnant. However, because of social, historical, economic and cultural context for a specific group, access to knowledge varies with the critical approach. This access can be given once the researcher begins to interact with those being researched and they begin to share their experiences.

For this study, using focus groups to help implement the two major approaches allowed the exchange of knowledge between myself and the group, which gave me an opportunity to interpret their experiences and social realities. Focus group discussions were used to assess AA collegiate women's perceptions concerning the cognitive and affective foundations for their attitudes, subjective norms, and perceptions of behavioral control on PA participation (based on the BFT theory). Focus groups, according to Hesse-Biber and Leavy (2011), consist of multiple participants being interviewed together.

The group dynamic provides an advantage as the participants not only answer the question posed by the researcher, but they also respond to group member's questions and create conversations about a specific topic (Hesse-Biber & Leavy, 2011). Focus groups can be used to

present a platform for marginalized/minority populations and provide “safe places” for them to share their stories, concepts and everyday life experiences (Hesse-Biber & Leavy, 2011). From a practical perspective, these underlying perceptions, both individually and as a group, were of great service because they provided substantial information about the kinds of considerations that guide their decisions regarding PA participation.

Research Setting and Participants

Thirty-one women were purposely recruited to participate in qualitative data collection for this study. The women selected for the focus groups were chosen based on their self-reported demographic information during the quantitative data collection phase. Using focus groups and surveys presented a holistic approach and created a complex understanding of a social reality (Hesse-Biber & Leavy, 2011). Ten different focus groups were held in a private office in a secure building on campus. Since the purpose of the study was to explore AA collegiate women, making sure the interviews took place on campus was important. The familiarity and the convenience of meeting on campus allowed for better retention and gave a better point of reference when discussing campus facilities and living arrangements.

The focus groups took place over the last two weeks in the Spring 2017 semester and the first three weeks of the Fall 2017 semester. The focus groups were scheduled based on the participants’ availability and all correspondence between participants and myself were confidential. Doodle Polls were used to Schedule dates and times for each focus group. The names, dates and times were only visible to me through the poll, protecting the identity of participants and allowed me great flexibility to select each focus group members without conflicts between participants. Three to four different women were present for each focus group, along with myself the principal investigator and a third-party research assistant designated as a note taker. To ensure

confidentiality, the participants names were not used during the focus groups and no identifiable information was used or available on any correspondence the entire time. The focus groups lasted between 45minutes to 1 hour and were held Monday-Saturday.

Data Analysis and Coding

Recorded focus group interviews were transcribed verbatim and used for data analysis. NVIVO software (Gibbs, 2002) was used to upload transcripts, conduct data analysis, and run thematic reports. Data analysis used open and closed coding techniques. Closed coding addressed the following topics: general PA behaviors, environmental factors that influence PA behavior, and cultural/gender influence on their perception of body image and PA. I used open coding to review the transcripts for emerging themes. The interview data and quantitative measures of TPB variables were first analyzed separately and then simultaneously to better understand the factors that influence AA collegiate women's planned behaviors for PA participation and find intersectionality among TPB and BFT.

While these questions were selected to address the pre-determined themes, participants were given extra time and encouraged to discuss other factors not mentioned above that influenced their decisions to be physically active. In other words, the questions were used as a guide to stimulate conversation and once the conversation begin, I as the moderator let the participants speak freely and openly about topics important to them and their perceptions of PA.

Every focus group interview was recorded using a voice recorder application on a cell phone. Upon completion of each focus group the interviews were saved with participants last name and the date. The saved focus group interviews were uploaded to dropbox, a secured file storage system, and saved on a personal flash drive stored in a secure office. The completed surveys from each participant was downloaded and merged into one-word document. This document contained

the participants, pseudonym name, demographical information and notes taken from their focus group interview. This document allowed me to have quick access to all of the women' information to assist me with data analysis and proper grouping. This document was also saved to dropbox and a personal flash drive. Once all the focus groups were finished the women were placed into four groups (contemplation, preparation, action and maintenance) according to their PA levels both reported on the surveys and discussed in the interviews. Once the groups were formed, a deeper exploration of their sociodemographic variables was warranted. Within each group a great level of diversity was discovered. The women represented different social locations (employment, age, class standing, etc.) which allowed for varying viewpoints within and between groups. The diverse backgrounds allowed for assorted, detailed and informative data.

Focus group interviews were transcribed after the last interview every week. The focus group interview transcriptions were saved in separate folders on dropbox and on a personal flash drive. Every week the transcriptions were compared to each other and the focus group interviews completed prior. This allowed me to pinpoint similarities, discrepancies and gave me the opportunity to make any changes to the interview guide as needed. Initially the similarities were listed as emerging themes, for example the women discussed the importance of friends, family and others support as a factor that influenced their PA participation and so "social support" became an emerging theme. During the consistent comparison of transcribed data, the following emerging themes were discovered; social support, motivation for PA, environment and body acceptance. Once the emerging themes were discovered, I narrowed down specific key phrases and words to assign codes and concrete themes. For social support reoccurring key phrases such as "family is important", "my brother is my biggest supporter," "my family holds me accountable", or "I avoid my family's opinion" "workout buddy" were placed under social support. However due to the

overwhelming responses that included family, social support became family influence as a theme. This process was continued with every emerging theme and every transcription until the all key phrases and statements were examined and thoroughly vetted to make sure they were properly labeled as definitive themes.

Once the key phrases and themes were presented, I searched for relationships among the statements and codes within each participant's full interview. I did this to gain a full understanding of each participants' perspectives and to make sure I represented their likeness properly. Once this was completed for each participant, I compared the findings to not only the women within their respective group but also across groups. This was done to show any key relationships that could tie statements and thoughts to certain demographic characteristics between the women and groups. This process was done until all sources of information was scrutinized and properly categorized.

Trustworthiness Techniques

Establishing the trustworthiness of this study is critical and an absolute necessity. It is important to implement the four constructs of trustworthiness, originally penned by Guba (1981). The four constructs are credibility, transferability, dependability and confirmability. The paragraphs below will explain each constraint and detailed information on how it was implemented into the study.

Credibility: This construct seeks to show that the study does measure what it was designed and intended for. In other words, how accurate do the findings represent the reality. According to Guba (1981) this is one of the most important constructs in proving the trustworthiness of a study. To provide credibility for this study I implemented the following strategies; member checking, triangulation and frequent debriefing sessions. Member checking involves immediate and follow up communication with participants to ensure that their words were properly recorded, written and

explained as they intended (Lincoln & Guba, 1985). Member checking was conducted during the focus group interviews where I would repeat back phrases for clarification, ask participants to correct me when interpreting their statements as well as sending transcribed interviews to participants to have them read over their answers and correct any misunderstandings before data analysis.

Using a mixed method approach allowed me to use triangulation in multiple ways. First, I could compare the quantitative data of their PA participation and self-reported answers regarding attitudes, environmental influences and other quantified data to their interview answers to determine if there were any discrepancies. I was also able to use triangulation by comparing the focus group transcription between different groups of women and within the same groups of women. This process was crucial in identifying, solidifying and validating themes in this study.

The last method I used for credibility was frequent debriefing sessions. I used two different colleagues and advisors to provide valid feedback regarding themes, codes and overall rationale of the data. Those involved in my debriefing ranged in expertise in qualitative methods to not having any research experience as well as having a different racial background and gender. With my background and racial identity as an AA woman, I found it very helpful to have others critique the data and challenge my own biases, provide advice to dig deeper into analysis and provide new ways to view and explain the findings to another audience.

Transferability: The purpose of this study was to explore AA collegiate women's perception and participation in PA. The idea of this study did not originate from me alone. I based my study off previous research with this population that used either quantitative or qualitative research methods. This construct is used to determine if the findings from one study can be applied to other studies with similar settings and contexts (Lincoln & Guba, 1985). Using the different

groupings, describing participants in detail and including sufficient data and statements were a few methods I used to help with transferability. It was my purpose to make sure that this study provided more than enough details to allow for another researcher to find something transferable to their research and research interests. While I did not create this study to be transferable I did seek to provide enough findings for future research studies to build upon and reference.

Dependability: According to Shenton, 2004, dependability is using techniques to show that if the study was repeated, with the same methods and participants' similar results would be obtained. To help provide some level of dependability I divulged great amounts of details with regards to study methods, criteria for participation, clear descriptions of instruments used and a paper trail of data collection and analysis. However, it is important to note that while the criteria for the participants may be replicable, the actual social locations of participants, levels of commitment and honesty from participants, finding similar environmental climates and preparing for unexpected variables cannot be repeated or controlled, making the chances of a full replication of this study unpredictable.

Confirmability: The final construct in helping to confirm the trustworthiness of this study is confirmability. Confirmability is explained by Shenton (2004) as ensuring as far as possible that the works findings are the results of the experiences and ideas of the informants, rather than the characteristics and preferences of the researchers. For this study, the use of triangulation, member checking, and peer debriefing were the most important techniques used to confirm that the findings were a direct result of the lived experiences and information from the participants. By engaging in these strategies, I could show how the perceptions and thoughts of the participants were the main priority and the driving force behind this study.

Researchers Subjectivity

As the primary researcher for the study it was important to address the various influences that led me to conduct research on this individual topic as well as explain my status as an “Outsider within” as defined by Patricia Hill-Collins. I chose to explore this topic because as an African American woman I did not engage in physical activity as an adolescent or as a young adult in college. The importance of physical activity and its ability to prevent fatal diseases were not discussed in my household, among my friends or within any classroom I sat in. Growing up I did not see any important figures in my life, such as my mother, grandmother, aunts or friends participating in any leisure physical activities. It wasn’t until I graduated from college and I was diagnosed with high blood pressure that I decided to change my lifestyle. It was then that I realized that being physically active was the only way for me to live the quality of life I wanted for myself.

Now, as a mother of two I have decided to show them how important it is to be active. I am doing this by breaking some generational cycles within my own family. I lead by example, I go on walks with my children, I take my children to the gym with me and I even do yoga with my daughter. I am hoping that by doing this my children will learn the importance of a healthy body and a healthy mind and will remain physically active throughout their lifetime. My purpose in conducting this research study was to determine if African American women in college are engaging in physical activity enough to meet the recommended guidelines and if similar factors that prohibited me from being active are responsible for their physical inactivity. I hope that this research will provide insight into what factors influence participation in this population and provide key information to help change any negative perceptions and increase the participation in physical activity for African American collegiate women.

For me to be completely transparent I must discuss how my various social locations had an impact on my research study design, assumptions and interpretations. My race, gender, socio-economic status, education level and position as a researcher simultaneously place both an insider and outsider label on me. As an AA woman who was physically inactive much of my youth and young adult life and was once an undergraduate student I have an inside perspective to this population's experiences. While my personal experience may not be shared with any or all the participants, it allows me to have empathy and an understanding of how certain factors like family, environmental conditions and the portrayal of African American women impact decisions on PA participation.

As an insider, I had to be aware of my own assumptions and interpretations of the data that emerge from both quantitative and qualitative methods. I had to approach this study as if I did not have any prior experience as an AA woman participating in PA. I believe this was the only way to avoid any bias analysis or any preconceived notions that would prohibit me from asking questions that I do not have the answer too. Even with my inside perspective I was still an outsider due to my current position as a graduate student and the principal investigator on this study. With my current knowledge of the importance of PA and the negative impact that inactivity can have on an individual's health, the participants may have seen me more as a judge than a person within their own social locations. As a mother and wife, my desire to appease potential mates and succumb to the pressures of media and peers are substantially lower than my potential participants.

It was crucial to this study that I presented myself as a researcher that was seeking their knowledge and unique perspective and ignoring my own personal experiences/opinions and researched knowledge. I made sure the participants were comfortable with me and that I did not assume that because I was an AA woman that they would automatically trust me. Being both an

insider and an outsider within the targeted population presented great rewards but also undeniable challenges, however in the end it was all worth it.

CHAPTER 4: RESULTS OF QUANTITATIVE ANALYSES

In this chapter, I report the analyzed quantitative data that explores AA collegiate women's physical activity levels using the IPAQ and the associations of demographic variables, environmental factors as well as the TPB variables (i.e., attitudes, subject norms, perceived behavioral control, and intention). The results are reported in the following order a.) Current PA of AA collegiate women, b.) Descriptive statistics for TPB and perceived environmental condition c.) the Hierarchical regression analysis.

Prior to data analyses all variables were screened for assumption violations, missing values and outliers using IBM SPSS. To address missing values in the data, a missing value analysis was completed. The analysis revealed two cases with less than 5% of missing data on one quantitative variable (perceived environment condition). Based on previous literature (Tabachnick & Fidell, 2007) regarding proportionately small missing values, mean substitution was used to replace 8missing values. No univariate outliers were detected and both skewness and kurtosis were normal. All measures displayed satisfactory reliability of internal consistency.

AA Collegiate Women's Physical Activity Involvement

To explore the PA involvement of participants' descriptive statistics were conducted on data collected using the. Cronbach's Alpha was used to determine the internal consistency of the IPAQ in this study. The analysis revealed a reliability of $\alpha=.53$, meaning there was fair or acceptable reliability for the IPAQ. According to Baguley (2009), Cronbach's alpha coefficient values of more than 0.7 are considered good but values of more than 0.5 are acceptable. Although the IPAQ is gathering PA data, it is gathering many types of activity, of different intensities and in different contexts. As discussed in chapter 3, the IPAQ was chosen to measure the PA levels of participants in various domains including leisure time. The IPAQ scoring allows the data to be

analyzed in 3 different units. The detailed duration (minutes spent per week and daily) and intensity (i.e., walking, moderate, and vigorous) in each domain were reported in Table 2.

Table 2: AA Collegiate Women's Weekly Physical Activity Involvement

Variables	Walking (minutes) Mean/SD	Moderate PA (minutes) Mean/SD	Vigorous PA (minutes) Mean/SD	Avg. PA Minutes per Day
Walking at Work	296.91/663.42			64.5/35.6
Walking for Transportation	217.55/459.75			38.8/67.7
Walking in Leisure Time	85.98/178.59			25.6/45.5
Moderate PA at Work		248.02/689.78		
Moderate Domestic Chores		73.37/186.37		47.8/113.5
Moderate Cycling for Transportation		6.89/42.98		
Moderate PA in Leisure Time		23.40/65.30		22.8/49.3
Vigorous PA at Work			107.19/334.12	
Vigorous Domestic Chores			41.17/137.09	2.22/11.0
Vigorous PA in Leisure Time			32.46/107.20	
Total Minutes	601.05/923.71	392.61/817.37	139.65/359.09	7.9/19.5

As shown in the table, AA collegiate women spent the most time engaging in PA (walking, moderate and vigorous) at work. Walking at work produced the highest duration of time spent in PA (296 minutes) followed by moderate PA at work (248 minutes) and vigorous PA at work (107 minutes). Also, on average participants spent 217 minutes a week walking as a form of transportation and Less than 10 minutes using biking as a form of transportation. Moderate and Vigorous domestic responsibilities accounted for 114 minutes of PA within a week. For this group when it came to engaging in leisure PA they spent the least amount of time engaging in moderate activities (23 minutes) and vigorous leisure PA (32 minutes). When examining the amount of time spent being PA across the domains of the IPAQ, it is clear that this population had the highest levels of PA at work, followed by walking as a form of transportation and spent more time walking for leisure PA.

To examine the PA habits of the AA collegiate women in this study more closely, the minutes per week were further analyzed by minutes per day for each domain. For walking, the participants spent over 1 hour of their scheduled shift walking at work, walked for 38 minutes for travel and spent 25 minutes walking for leisure on different days throughout the week. Moderate PA activity showed the most time within the day was spent engaging in PA at work (47 minutes), and the least amount of time (less than 10 minutes) participating in moderate PA for leisure and biking as a form of transportation. For their vigorous PA, participants spent close to 30 minutes of Vigorous PA at work and less than 15 minutes of vigorous PA for leisure.

The 2008 PA Guidelines state that any amount of PA is beneficial, however for substantial health benefits individuals should engage in 150 minutes of moderate PA a week or 75 minutes of vigorous PA a week, or a combination of the two. These guidelines can be broken down to 20

minutes of moderate activity per day or 10 minutes of vigorous per day. The participants did not meet the recommended guidelines for leisure MVPA.

The data found in the above chart shows us the average time spent engaged in various domains of PA. It is important to note that the participants of this study PA behaviors are heterogenous, they can range from physically inactive to extremely active within the MVPA domain and others. With such detailed information, researchers and practitioners can now better understand the PA behaviors of this population and find strategies to help increase PA engagement of those less active and learn new ways to retain and support those currently active.

Descriptions of Theory of Planned Behavior (TPB) Variables

TPB constructs in table 3 are intent, attitude, subjective norm, perceived behavioral control, and perceived environmental condition. Participants reported high scores on the variables of intention, attitude, and perceived behavioral control, suggesting that AA collegiate women overall had strong intent to engage in physical activity in the future, and positive feelings about PA based on its usefulness and importance. Also, they showed confidence in their ability to overcome obstacles to engage in PA. However, the moderate scores in subject norms and perceived environmental condition indicated that their perceptions of important others and environmental condition related to physical activity were neutral.

Table 3: Descriptive Analyses of TPB Variables and Perceived Environmental Condition

Variables	Range	Mean	SD	α
Intent	1-7	6.15	1.267	.927
Perceived Behavioral Control	1-7	6.24	.826	.867
Subjective Norm	1-7	4.12	.985	.807
Attitude	1-7	5.04	.618	.748
Perceived environmental condition	1-4	2.55	.507	.691

Note: α : Cronbach's Alpha measures internal reliability, ranges from 0-1. Variables closer to 1 have a higher internal reliability at measuring the intended construct

Hierarchical Regression Analysis

A hierarchical regression analysis was conducted to identify the predictive functions of TPB variables and perceived environmental conditions on the overall PA involvement. Before the regression, a correlational analysis was conducted as the preliminary. As shown in Table 4, intent was significantly related to attitude but not with other variables. Attitude was significantly correlated with both subjective norm and perceived behavioral control. Subjective norm and perceived behavioral control showed a significantly correlated relationship. Interestingly, attitude was negatively correlated with the perceived environmental condition, suggesting that low satisfaction of neighborhood condition might initiate high negative attitudes to physical activity participation. Continuing with the perceived environmental condition, this variable also had a significant correlation between perceived environmental condition and overall PA involvement.

Lastly, it important to address the lack of correlation between the theoretical variables and the study outcome variable. There are two possible reasons leading to the lack of correlation or even negative correlation between TPB variables and PA. First, the TPB has been used widely to

show the relationship between its constructs and an individual's intent to engage in a particular behavior. Intention is the immediate determinate of volitional behavior (Gagne & Godin, 2000). However, this study was designed to understand the overall PA levels of this population and not explicitly measure intent to engage in leisure PA. Unlike other populations that their overall PA levels are mostly identical or consistent with their intentional PA (i.e., exercise) in leisure time (Sniehotta, Pesseau & Araujo-Soares, 2014), the group in this study was kind of unique, with the majority of PA being from other non-leisure categories with intent or no intent, such as the PA recorded with the domains of work, transportation, domestic responsibilities. It is likely that that the amount of PA from other categories with no intent might override that of intentional behaviors. As such, predictive role of the TPB in overall PA behavior was jeopardized or even reversed. Second, because of the lack of published research with an exclusively AA female sample using the TPB, I considered this study as exploratory and it is also likely that the participant characteristics and perceived identity might alleviate the impact of planned behavior (Nigbur, Lyons & Uzzell, 2010).

Table 4: Inter-Correlations between TPB Variables, Perceived Environmental Conditions and Total PA Involvements (N=97): *Note.* * $p < .05$ (2-tailed); ** $p < .01$ (2-tailed)

	1	2	3	4	5	6
1. Intent	1	.408**	.194	.120	-.017	.035
2. Attitude		1	.371**	.356**	-.250*	.106
3. Subjective norm			1	.256*	-.086	.014
4. Perceived behavior control				1	-.180	-.184
5. Perceived environmental condition					1	.281**
6. Total PA involvement						1

A hierarchical regression analysis predicting total PA involvement was then conducted. Specifically, age, employment status (i.e., full, part-time, none), living status (i.e., on campus vs out of campus), and class standing (i.e., freshman, sophomore, junior, and senior) were entered first for controlling their influence. The results revealed that such demographic variables were not associated with the total PA involvement directly. They explained only 5% of the variance in the PA involvement. Following TPB, I entered intention as the second level predictor. Intention was not found to be a significant predictor of the PA involvement. The change of the total variance explained was less than 1%. Finally, I entered TPB variables (i.e., attitude, subject norms, and perceived control) and perceived environmental condition in a separate block.

The model was statistically significantly $F(9,86) = 2.24, p < .05$ and accounted for 19.0% of the variance in total PA involvement in one week. The model was statistically significantly $F(9,86) = 2.24, p < .05$ and accounted for 19.0% of the variance in total PA involvement in one week. In this model, attitude, perceived behavioral control and perceived environment condition contributed unique variance (7%, 5% and 7%) to total PA involvement in this population. Three predictors were statistically significant; Perceived environmental condition was the strongest predictor of the total PA involvement, followed by attitude. Perceived Behavioral control was a negative predictor of total PA in this population, which is inconsistent with the assumption of the TPB. The major reason leading to the results might contribute to the nature of PA measure in this study. Because of a possible overriding of non-intent PA on intent PA, PBC had a negative role of the overall PA with the predominated non-intent PA behavior. Subjective Norms contributed the least amount of all TPB variables. The full regression analysis results are found in Table 5.

Table 5: Final Results of Hierarchical Regression Analyses: Note: $p < .01^{**}$, $p < .05^{*}$

Dependent Variable	Predictors	Estimated Standard Errors	Standardized Coefficients Beta	T value
Total PA involvement	Age	327.56	.13	1.13
	Employment	6127.91	.12	1.06
	Class Standing	9883.78	-.19	-1.58
	Residency	9019.36	-.08	-.72
	Intention	3345.66	-.05	-.43
	Attitude	7714.77	.28	2.27*
	Subject norm	4237.56	.03	.25
	Perceived behavioral control	5049.40	-.24	2.22*
	Perceived environmental condition	8074.86	.28	2.67**

CHAPTER 5: RESULTS OF QUALITATIVE ANALYSES

Drawing from the theoretical frameworks of the Theory of Planned Behavior (TPB) and BFT (BFT), I present the qualitative data on the research question of what possible gender, racial, and cultural identity factors AA collegiate women perceive to be influential in their decision about PA participations. The findings from this chapter are explained by using the intersectionality of the Theory of Planned Behavior constructs, environmental factors and BFT. Specifically, I used the BFT to demonstrate how gender and race have a significant influence on TPB constructs of attitude, perceived behavioral control and subjective norm as well as their perception of environmental factors for AA collegiate women. This chapter strives to show that AA women have a unique perspective regarding physical activity and its necessity in their lives. This chapter is divided into three sections. The first section describes the focus group participants and their current level of PA. Section two analyzes the factors discovered during data analysis and in the final section of this chapter I summarize the findings and interpret their importance to the study.

Section One: Description of Participants

Thirty-one women volunteered to participate in ten separate focus groups. The women's demographic information recorded on the quantitative surveys were used to place them in groups. The groups were created based on age, employment status, current PA levels, class standing and both marital and parental status. It was important to create groups that shared similar and different characteristics to show variability among the women. The following information provides details about all focus group participants, including participants' PA background, the types of PA they chose to do, and how their PA participation has changed over time. I categorized the participants into four groups (i.e., contemplation, preparation, action, and maintenance) based on their current

PA levels self-reported on their quantitative survey., according to the transtheoretical model for health behavior change (Prochaska & Velicer,1997).

All the women were asked to define physical activity, and everyone agreed that physical activity was any type of bodily movement. Stacy described PA as “doing something more than just typical, normal activities you wouldn’t do every day, something to um get your heart rate up and work up a sweat.” Tori added that PA for her is “moving and stuff like walking and movement like household chores, that you would do. It involves a lot of movement, things that would be considered cardio, sports.” Other participants described physical activity as “movement with exertion”, “movement to increase heart rate” and “intentional and non-intentional movement.”

Contemplation group

I categorized the following group of women as contemplation because they have stated that they are planning to begin a PA regiment within the next 6 months (contemplation). Five participants are in the contemplation group and they are listed below in table 6:

Table 6: Demographics chart for contemplation group

Name	Age	Marital Status	Children	Employed	School/Class Standing	Major College	Residency	Exercise Status
Mia	23	Single	No	No	Full-time/Senior	Engineering	On Campus	2
Natalie	19	Single	No	Part-Time	Full-time/Sophomore	L A&S	On Campus	2
Madison	18	Single	No	No	Full-time/Freshman	FPC Arts	On Campus	2
Ashley	62	Divorced	Yes	Full-Time	Part-time/Senior	FPC Arts	Off Campus	2
Riley	19	Single	No	Part-Time	Full-time/Freshman	Nursing	On Campus	2

Key: **FPC Arts:** Fine, Performing and Communication Arts, **L A&S:** Liberal Arts and Sciences, **COE:** College of Education, **2:** Does not exercise but intends to start in 6 months

The women in this group planned to participate in cardio activities such as jogging, fitness classes and yoga when they eventually start a PA routine. All five women credited more responsibilities, lack of participation on organized sport teams or active groups (marching band) and getting older as reasons that their PA levels have changed. **Riley** stated, “It has definitely decreased as I’ve gotten older but that’s just because I have more responsibility on my plate.” Similarly, **Madison** explained that school work has created an obstacle for her PA, “studying a lot more. And when I’m done studying, I’m just like, ‘I can’t’, even though I need that.”

Preparation Group

The preparation group are those women that have taken steps to begin changing their PA levels and health behaviors. Thirteen women have started to engage in PA, but not on a regular basis (three or more times a week). Demographic information on all thirteen women are listed below in table 7.

Table 7: Demographics chart for preparation group

Name	Age	Marital Status	Children	Employed	School/Class Standing	Major College	Residency	Exercise Status
Kandi	24	Single	No	Part-Time	Full-time/Senior	FPC Arts	On Campus	3
Renee	63	Single	Yes	No	Full-time/Senior	FPC Arts	Off Campus	3
Tiffany	36	Single	No	Full-Time	Part-time/Sophomore	Business	Off Campus	3
Melissa	30	Single	No	Full-Time	Part-time/Senior	L A&S	Off Campus	3
Brenda	18	Single	No	No	Full-time/Freshman	L A&S	Off campus	3
Shana	43	Divorced	Yes	No	Full-time/Junior	Social Work	Off campus	3
Tasha	18	Single	No	No	Full-time/Freshman	Engineering	On Campus	3
Savannah	21	Single	No	Part-Time	Full-time/Senior	COE	On Campus	3
Ava	20	Single	No	Part-Time	Full-time/Junior	Engineering	On Campus	3
Stacy	18	Single	No	No	Full-time/Sophomore	L A&S	On Campus	3
Denise	47	Married	Yes	Full-Time	Part-time/Sophomore	Business	Off Campus	3
Paris	23	Single	No	Full-Time	Part-time/Senior	COE	On Campus	3
Danielle	21	Single	No	Part-Time	Full-time/Junior	L A&S	On Campus	3

Key: **FPC Arts:** Fine, Performing and Communication Arts, **L A&S:** Liberal Arts and Sciences, **COE:** College of Education, **3:**

Exercises but not regularly

Most women in this group engaged in PA such as bike riding, walking for leisure, dancing and using cardio equipment at a gym. All women agreed that they wanted to engage in PA more often and more consistently. Each participant gave varying reasons as to why their PA levels have changed over time. The responses ranged from injuries, having children, lack of participation on an organized sport team (track/tennis) and increase of responsibilities. **Paris**, a member of the preparation group noted that before the survey she was not as active, “Like in the past month or so I’ve been going to the gym more often.” Over time her PA has changed, “I always think back to like a year or two ago, where I tried to start going to the gym regularly, but I would just go and eat junk food afterwards. Now I’m more serious about it, so I’m working out more often and make sure I watch what I eat, too.”

Action Group

Of the 31 women in the focus groups, six have expressed that they have been PA regularly within the last six months. Based on the criteria set forth by Prochaska & Velicer (1997), I identified this category as the action group. The action stage is when an individual has made specific and explicit health behavior changes within the last six months. Demographic information for all six action group members are listed below in table 8.

Table 8: Demographics chart for action group

Name	Age	Marital Status	Children	Employed	School/Class Standing	Major College	Residency	Exercise Status
Sophia	18	Single	No	No	Full-time/Freshman	Nursing	On Campus	4
Chloe	20	Single	No	Part-Time	Full-time/Senior	L A&S	On Campus	4
Tonya	19	Single	No	Part-Time	Full-time/Sophomore	FPC Arts	Off Campus	4
Sharon	35	Divorced	No	Full-Time	Full-time/Sophomore	Nursing	Off Campus	4
Bailey	22	Single	No	Part-Time	Part-time/Junior	L A&S	On Campus	4
Nicole	23	Single	No	Part-Time	Full-time/Senior	Social Work	On Campus	4

Key: **FPC Arts:** Fine, Performing and Communication Arts, **L A&S:** Liberal Arts and Sciences, **COE:** College of Education, **4:** Exercise regularly but just within last 6 months

The women in this group used the gym or fitness center and walked for leisure, transportation and at work as their preference for PA. For many of the women in this group, the change from high school to college changed their level of PA. Most of the women were high school athletes and are no longer actively involved in athletics. Other reasons for changes in PA with this group are mental health (depression) and changes in marital status; divorce. **Chloe**, one of the women in the action group works out at the gym and she does a lot of walking at her job at the local hospital. When asked how her PA has changed over time, Chloe said the following, “In high school, marching band was a really big-time commitment and then you get to college and all of this free time in your life and you have to figure out ways to like work out.”

Maintenance Group

The final six women comprise the maintenance group. Individuals in this group have more confidence in their ability to sustain their health behavior (PA) and have been doing so longer than 6 months. Detailed information about each maintenance group member is listed below in table 9.

Table 9: Demographic chart for maintenance group

Name	Age	Marital Status	Children	Employed	School/Class Standing	Major College	Residency	Exercise Status	LFA Enrollment
Cynthia	22	Single	No	No	Full-time/Senior	COE	On Campus	5	No
Asia	21	Single	No	No	Full-time/Senior	L A&S	On Campus	5	No
Heather	21	Single	No	Part-Time	Full-time/Junior	Business	Off Campus	5	No
Tori	34	Single	No	No	Part-time/Senior	L A&S	Off Campus	5	No
Karen	34	Single	No	Full-Time	Part-time/Freshman	Pharmacy	Off Campus	5	No
Joan	46	Single	No	Part-Time	Part-Time/Senior	L A&S	Off Campus	5	No

Key: **FPC Arts:** Fine, Performing and Communication Arts, **L A&S:** Liberal Arts and Sciences, **COE:** College of Education, **5:** Exercise regularly and has been longer than 6 months.

The women in this group consider working out as a priority and work out 5-7 times a week. They incorporate cardio, dancing, weight lifting and walking into their daily PA routines. When discussing how PA has changed over time, this group of women showed an increase of PA over time and discussed things like improvement of strength and overall fitness. **Karen**, who is a full-time personal trainer and the owner of a “fitness flash mob” engages in PA seven days a week. When asked if her PA has changed over time, Karen explained the following “When I was first in undergrad I just ate what I wanted, drank what I wanted and gained weight. So, in 2012, I decided to get serious about my health, I lost over 65 pounds and I’ve been extremely active ever since.”

In conclusion, the purpose of section one was to provide detailed information about all 31 participants to give insight into them as individuals and how their PA background may influence their responses and reactions in the focus groups. The placement into the above groups are based solely on their statement of participation in PA, however it is important to explore other socio demographics to compare the women across all four groups. Consistent with BFT, I found that there is diversity among AA collegiate women in physical activity involvement in terms of age, class, and other social locations.

Section Two: Findings

The following paragraphs will present the data from the focus groups to help understand the perceptions of PA and how they impact PA engagement. To address the research question, I analyzed their interview responses. Besides contemporary discourses about health benefits of PA, AA collegiate women’s perceptions of gender, racial, and cultural identify factors impacted their beliefs and intention/participation in PA.

Influences on Behavioral Beliefs

The attitude construct in TPB represents a positive or negative affirmation toward a behavior. When an individual associates a positive attitude toward a behavior the more likely the individual will purposely engage in that behavior (Ajzen, 2006). The BFT states that viewpoints, experiences, and simple diversity among black women will vary and present different outcomes of shared themes within the group. For the AA college women in this study, the influence of the culture and the community can impact not only how they view themselves with regards to body image and what is acceptable but also their attitude toward PA engagement.

For those in the contemplation group the value and importance of PA was not openly expressed from the women and, in particular the, maintenance of their hair was the main factor that kept them from engaging in PA. The women in the preparation group, which had the largest number of women and the most diverse socio demographic background, shared varying views about PA. The women in this group were concerned about their health and longevity while others felt that just working out was for a short-term gain. The maintenance and Action groups were very straightforward about how appearance and hair were not critical in PA participation. For them, PA engagement is a lifestyle and an active part of their daily routines. While this only scratched the surface of the varying factors that can impact perceptions and participation in PA, the thoughts and perspectives from the participants were interesting and informative.

The following paragraphs will use the direct quotes of the AA collegiate women to express their attitudes toward physical activity and provide their reasons for engagement or lack of. The themes were discovered through coding key phrases and words that the participants used during the focus group sessions.

Value of PA

Value of PA is used to describe the findings that the women felt were stable and non-changing in determining PA engagement for them. These findings explain the women's perceptions about the level of importance placed on PA in their lives. The findings below explain how the pre-existing attitude influence their intentions for PA.

Riley, a member of the contemplation group who is currently not physically active, said the following about her PA participation "Could I do more? Yes, I could do more, I just don't. I'm not that committed to it. It's just not my number one priority." Other participants who engaged in PA but not regularly (preparation group) showed varying views about PA and its importance to them. Brenda, said blatantly "I just don't like working out" and Kandi stated "I don't like to be outside, I don't really like to exercise. I love to be inside, watching Netflix not outside being social and active." When asked if PA was a priority for her, Other members within the preparation group Melissa a senior in college, stated "Yes, it is."

More analysis of the data revealed that participants who were active shared a different attitude about PA and its importance in their lives. Karen, who is active 7 days a week viewed PA as "a priority" in her life and valuable. Heather, an avid body builder, said this about being PA "it's a priority, I always have time to go to the gym, it's very healthy for your body."

Longevity/Health

For most of the participants having good health or trying to avoid health issues was the key factor in having a positive attitude toward intending to engage in PA. Madison, one of the young women in the contemplation group, gave the following reason for her motivation to begin PA participation "I need to get my health in order, and since I'm young, I don't want to mess it up early. I want to get out and do stuff." Bailey, whose been consistently working out the last six

months said her purpose for being PA is “my health, I was diagnosed with type I diabetes at the age of 9, so I’m trying to stay as healthy as possible.” Savannah, a former high school athlete, mentions family health history as cause for her PA participation, “Just to stay healthy, because I know my family history and everything.”

Joan, a 46-year-old woman whose been exercising for longer than six months said

I think, for the most part, for health reasons. You know, as we get older we want to sustain our vitality and youthfulness and proper functionality of our bodies. You know and just trying to stay healthy. You know, it’s a health-conscious aspect.

To add to that Paris, who participates in PA but not regularly, explains her inspiration for PA engagement, “Probably just my overall health, I know just living a sedentary lifestyle overtime can jeopardize your health, and you can have problems later on in life. Probably just to make sure I stay healthy and stay fit.” Karen, who’s a personal trainer, credited her health as a major motivating factor for being PA “umm, long-term health, the uh quality of life that I want for myself, I plan on living well past the age of 100 years old, and so I have to keep the vessel that I expect to get me there trained up and healthy.”

Body Image

The women in the focus groups were not shy about talking about how body image and body size were different within the AA culture and community compared to the beauty standards of other cultures and how they impacted their PA participation. The women were asked to express their thoughts about how different races view body size differently when it comes to what is acceptable and what is not. All 31 of the women spoke freely about their thoughts on body image differences between their culture and others. Their responses are below.

Tori, a 34-year-old woman in the maintenance group, shares how messages about body image in society can be confusing for her. Tori explained body image and how it impacted her:

In general, American culture it's a fit person but if you're African-American it can look a little more, not necessarily that skinny or super fit but some meat on the bones. It's a lot of mixed messages am I supposed to look like this or look like that and you know I just get confused because I'm like I'm just going to lose a lot of weight.

Brenda, from the preparation group openly expresses her body satisfaction, responded to the question regarding body image and its impact with this "I've always been pretty okay with my body type.... So, it was do I want other people's opinion or what I like and don't like to do. So, I chose my own."

Other participants such as Mia (contemplation), Savannah (preparation), and Ava (preparation) acknowledged the cultural difference in what is an acceptable body size. Ava, explains her position, "I think with race and culture there's a different standard, In the African-American culture, when women are maybe curvier or thicker, it's still acceptable and beautiful. Maybe with Caucasians or other cultures, it's not the same."

Mia agreed and said "I think Caucasian people, their ideal good size would be skinny, and just like not fat on a woman's body, versus like in African-American communities where it's okay to have some weight on you. I think it's a little bit more acceptable for African-Americans to have maybe some fat on their body, even if it's a little bit over. I don't want to say excessive, but it's more acceptable to be overweight, or just not skinny." Tonya, a theatre major that discusses how she struggles with the pressures of trying to get roles, brings a different perspective about the body image differences within the AA culture. Tonya's said this:

A black girls figure is supposed to be big boobs, small waist, big ass. So, I feel like with women it's even harder. I mean especially when it comes to shape. cuz, it's just like you're supposed to be curvy or else if your straight than. if you have like almost a straight figure and no curves at all than you're just invisible.

Tonya believed that this impacts PA participation for some women as well as other things. She continued, “Well going to the gym won’t happen because you are supposed to have a big butt and more women are wanting to eat more foods, so they can get bigger and have bigger boobs.” So, yea, it really impacts a lot, like mentally too.”

Madison explicitly talked about how the lack of acceptance of the AA body fosters lower self-esteem, insecurities and higher levels of body satisfaction among AA women. Madison as well as other women were very vivid about how the lack of acceptance and the high levels of judgement causes resentment toward other cultures and even within the AA culture (curvy shapes versus slim and non-curvaceous shapes). Madison said this,

I feel like white women are praised more. So African-American women are like, do I have to look like that? And they become uncomfortable with their selves, like okay now I have to change to look like them. They probably think that somebody with lighter skin or slender body looks better than they do.

Madison emphasized that the older she had gotten, the easier it had become for her to accept herself and not let things impact her, “it used to, but not anymore, because I’ve become more comfortable with myself, and I want to live up to my own expectations and now what somebody else wants me to look like.” Sharon, a mixed-race woman in the action group, brought a different viewpoint about body image.

My entire household, with the exception of my mother is black, stepsisters and brothers. Within the Caucasian community, I’m judged more for being overweight, and for being taller and being plus-sized. Whereas, in the African-American community I’m not judged as harshly for that, and it’s more so, “Oh girl, you got curves, you’re just thick. Which causes me to not identify more with the Caucasian community.

While every participant spoke about the general acceptance of different body types within the African American culture, when asked what an acceptable body type to them, their answers were diverse. Sophia’s acceptable boy type was “someone with a flat stomach, small waist and a

large butt.” Savannah says the opposite, “somebody’s that’s skinny, the perfect body, no cellulite, none of that.” Ashley agrees and says” basically kind of the same thing, umm not to skinny but maybe slim or at least in shape.” Sharon, simply says “Tyra Banks” and Mia concludes the conversation with her opinion “more of a slender build, I wouldn’t say skinny, but slender, definitely not overweight. Yes, not fat, not super-skinny, but just like average.”

Appearance

Kandi, Melissa, Riley and Tiffany all agreed that their personal appearance and “looking good” is a huge factor in their decision to be PA. Kandi, who does not find a true value in PA but feels pressure from her family about her weight and future romantic relationships lays out her short-term goals for PA, “So I feel like I wanna have a six pack early, a flat stomach before I have children. So, I believe I need to get out now, I just want one bikini picture and I’ll be satisfied, so that’s my goal.” Melissa credits her recent weight loss as her motivation to stay involved with PA “Last year I lost like 40 pounds and I don’t want to gain those back. I want to keep that a priority because I like the way it feels. I want to keep that up.” Melissa also credits her family as being influential in her perception of appearance and how it’s a stigma to be the “fat one” in the family.

Riley felt that being healthy was important, but for her looking good was a priority as well. She explained, “so it’s like, of course I wanna be healthy, but I also wanna look good because if I look good than I feel good. I wanna look nice too.” Riley openly discussed how her parents engrained the idea of smaller being attractive, she adds “I know if I got bigger, my family would tear into me so quick.”

Similarly, Tiffany a military veteran and mother of one described why looking good was a motivating factor for her:

I do wanna maintain my size as well and I don’t wanna just maintain, I wanna look nice as well. Like I don’t wanna wear my clothes according to how they fit, I want

them to fit me, I'm wearing the clothes, the clothes should complement me. So, it's you know, it's a pride thing too. I wanna look good as well and you gotta work on that kinda thing.

Sophia and Shana also viewed PA as a positive thing from seeing other people with “fit bodies”. Sophia, a freshman in college is influenced by the appearance of fellow students, said, “seeing people with really fit bodies, seriously does, because this campus is really, like a lot of people are really fit.” Sophia, a former high school student-athlete continued to discuss how she wants to tone up and look nice for her spouse.

Hair

Every single participant stated that their hair was “very important” to them and most of them spent on average 4 hours a week caring for their hair. For those participants who wore natural styles such as dreadlocks stated that while their hair was important they did not spend a lot of time on it nor did it prevent them from being physically active at times. Karen, who is a personal trainer, shares her experiences with her clients and their hair. “I have a lot of clients who it effects. I have clients who I have to train them on this day because every Friday is their hair appointment. So umm it is a huge impact on many women, I've heard women say they don't workout at all because of their hair, which I think is absurd, but not me but people close to me.”

Danielle wears her hair both straight and in its naturally curly pattern and still faces obstacle to maintaining her hair while being PA. Danielle says, “Sometimes it will impact, it's like I don't want to go to the gym because I just flat-ironed my hair yesterday and if my hair sweats I'm not spending two hours to do it again.” Riley clearly states how she feels about her hair and PA, “if my hair just got done, I ain't going to the gym. It's a waste of time and a waste of money.” Tiffany shares her hair rule that helps her be more physically active, “So the first three days after I get my hair pressed out, yeah, I'm not doing too much of anything.” Sophia talks about how she feels

about being PA and her hair, “If I know I’m going to be sweating and I just did my hair, I won’t work out, because I don’t want to do my hair again. Its tedious.” Sharon also shares her decision on PA and her hair care routine, “depending on what is going on with my hair, that affects how I work out and how often I work out.”

Savannah, a 21-year-old senior apart of the preparation group, shares an experience that recently took place:

We had to do the underwater lane in my exercise physiology class and my teacher was like, Oh, your hair has to go under. I said never mind, I’m not doing it, and everybody was like why? I was the only black person in class and I’m like I just got my hair done and they’re like what does that mean. I’m like okay they don’t get it. My teacher was like, just do it and I said no, you can’t make me, I’m just not going to get my hair wet. He was like that doesn’t make sense but I’m like okay, you’re white, you don’t get it.

Influences on Control Beliefs

This factor, also known as the perceived behavioral control, in TPB looks at an individual’s perception or ability to overcome elements that may prevent them from participating in a certain activity or behavior. Ajzen (2002), states that PBC can impact behavior indirectly because of its influence on intention. The following outlines the most frequently discussed obstacles participants faced when attempting to participate in PA. Factors such as employment responsibilities, parental duties and commitment to academics are the three main influences on PBC among participants. Another factor was the level of PA of the participant than those who were novice or inactive. I coded each PBC based on key phases that many participants used to describe their obstacles like “time consuming” “lack of free time” “no resources” “other health issues”. These phases became themes once they were repeated multiple times between the multiple focus groups. It is important to note that while these themes are not exclusive to AA women, the diversity of what are obstacles among the women and the groups show that the BFT assumption that social locations, experiences

and attitudes will vary among black women. These assumptions have allowed for a rich discussion of obstacles these women face.

Time Constraints

All participants stated that lack of time was the biggest obstacle that they had when attempting to engage in PA. Natalie, a sophomore student worker on campus and former high School marching band member, explains how the lack of structured PA and the lack of free time has created obstacles for Natalie to partake in regular PA. She explains it “I’m going to really weigh things out. I’m contemplating should I work out and how much time will it take when I go. Then I’m sitting there like wasting time thinking about it, so I just don’t do it.” Shana, Nicole and Tonya spoke about how the responsibility of school deducts from their time commitment to PA. Nicole, a senior and part time employee said the following “I would stay time, especially with being in school and working. I have an internship and I have weekend classes, so I don’t really have time to be physically active.” Tonya expresses similar thoughts about homework and time for PA engagement, “I have to worry about a whole bunch of things. There are times that I want to go to the gym so badly, but I need to get homework done. It feels like just a lot of stuff in the way of what I really want to do.”

Shana and other participants gave their reasons for time constraints based off other responsibilities outside of school. This is what Shana, a single mother who lives off campus stated this “time has been a big one, the demand of homework, classes, managing taking care of children and I also have a sick parent that is terminally ill.” Joan who considers herself to be PA on a regular basis said this about time as a constraint and how she helps keep herself focused, “When you think about it, you have the motivation, but then you think about the constraints. You get off work and you have other things to do and as the day progresses, you’re looking at the watch and thinking,

man I just don't have the time. But, you actually do, I actually have time and I need to make the time."

Paris and Melissa share how time management and sticking to a schedule are an issue for them. Melissa explains it like this "Not scheduling my time, my day, accordingly. The alarm comes on, I hit it and lay back down. Next thing I know I'm rushing, so then that workout never happens because I have other things to do."

Lack of Resources and Health Constraints

Fewer women gave other antecedents to their PA engagement. These women were not active at the time and were full-time unemployed students. Brenda talks about the lack of appropriate workout gear for her body, "finding the proper sports bra that's always a huge problem for me. It's either choose to not wear the right bra or suffocate and wear two."

Kandi brought up the topic of money and food access, "food versus exercise, Like I'm a struggling student as we all are, so I can't exercise if I don't have food to eat or I don't have enough food to eat to exercise, I'll be burning too many calories, you know it's not worth it." Bailey shared a more personal reason for her battle with increasing PA in her life "I would say mainly, I deal with anxiety and depression, so those two factors play a really big role in what I feel like I am and am not capable of doing throughout the day." A few other participants noted that at the time of the study they were battling injuries, Cynthia says this "So, right now I'm battling a hamstring injury, I've had a couple of injuries, they were all pretty minor since I've been here."

For various reasons and varying levels of responsibilities, participants found that lack of time and improper time management were key in preventing them from participating in PA are often as they intended to. Every participant had some form of constraint but the participants that were engaged in PA regularly found ways to overcome obstacles while those in the preparation

group struggled to find strategies that would help them stay consistent in their PA. While they presented the obstacles that they face, providing effective and relevant strategies that they can use to overcome these constraints will be crucial in increasing PA engagement for this population.

Subjective Normative Beliefs

The last construct in TPB seeks to explore how an individual's concern about the approval or disapproval of important people in their life, influences their decisions to participate in a behavior. Subjective norm also goes further into the actual motivation of complying with either the approval or disapproval of the behavior by valuable people in their lives. The BFT discusses how black women seek to express their own views of culture in different forms. One form is the inter relationship they have with people in their lives (friends, family, community), This is used to express the women's views on how influential the opinions of those they love are on their decisions to be physically active. I coded the data, and identified common themes based on the responses participants gave to the questions that asked about the importance of family, friends and significant others in their lives. Another aspect of the BFT discusses the act of black women engaging in self-valuation and self -defining. This theme of the BFT focuses on AA women's internalization of stereo types and how they challenge these false representations to create new images of them. This is represented through the themes that explore social media, print/radio/television influence on their perception of PA and themselves.

Family Support

Mia volunteers to share an experience she had with her mother after coming home to visit her from college:

My mom, we visit her I don't know, once or twice a month, so she can see the changes in our body. I have four other sisters and she'll go down the row like, 'you need to lose weight' and she'll come to me and say, 'oh, you gained weight, you look great.' I say what's the difference between my older sister and me because

we're both kind of overweight at the current moment, in your opinion and you're saying I look good, but she doesn't.

Mia goes on to say that the messages she gets are “conflicting, confusing and makes us self-conscious.” When asked if she is influenced to be physically active from the message she gets from her mother, she said “Yes”.

Nicole's mother is an employee at a local gym but for Nicole she says, “that whole working out thing didn't rub off on me”. For her, the importance that her mother places on being physically active does not impact her decisions to engage in PA. She explains the following, “I never engaged in physical activity like growing up or anything like that. And like now that I'm older and like she did see me put on weight, she's kinda pressuring me more and more like you need to come workout with me.” Ava shares how it took a while for her to accept her family's support and opinions on her PA levels, “Yes, I think it's important. At first, I wasn't really receptive of it, because I kind of viewed it as a little bit condescending. But then I kind of realized that most people have my best interest and just want to be supportive.”

Riley's parental influence stems from her childhood and has molded her own perception of what is attractive. “Because my mom was a slim girl and my dad was a slim man, I think they placed a lot of emphasis on the fact that being smaller was considered like, more attractive. I know if I got bigger, my family would tear into me so quick. I've been conditioned to believe if you're smaller you look better.”

Heather who is a power lifter and places a high value on PA discusses her experience with her family and their support. “My sisters very supportive and my mother she worries that I'm gonna somehow crush my uterus. She's always like you're a female and you have a different kind of body.”

Lastly, Sharon shares with the group how she no longer looks for family support. “Over the years, I’ve had to realize that if I take into account everything that everyone says, I’ll never do anything for myself. And being healthy is more important than somebody saying, you should do this, or you should do that, or you shouldn’t do this or should do that. So, for me, it’s important but at the same time I’ve had to make my own decisions regarding my physical activity, my health.”

Media Portrayal and Influence

Over half of the participants felt that the portrayal of AA women in various media outlets were important because of the impact it has on their perception of their body and PA engagement.

Karen said the following,

well uhhhh, I think it’s hard to find a big corporation and companies who put umm, people of color in an athletic or fitness environment. So, a lot of your big brands you’re going to see lighter skin or fairer skin women, umm working out and exercising and then with social media there’s even a huge movement for like, black women who are over 200 pounds and are working out and, so I think our peers, us as a community has created a culture of black women who work out, but media hasn’t and, so we’ve had to pull ourselves up by our bootstraps as usual and create that environment.

Tori talks about how a positive media portrayal would help her, “I think that if I saw more active African-American women in the media I would be to. I think that positive role models are import in media.” Sophia shared her thoughts on the portrayal of AA women in the media. She commented:

I feel like everybody thinks like African-American women don’t work out like that and like everybody’s trying to achieve the African-American body. I don’t think media thinks we work out that much, that we’re physically active like that. Like when I see TV workout commercials it’s all a bunch of white women, Hispanics and stuff. Definitely not equally portrayed.

Savannah goes into more details about commercials “You don’t really see like in Nike commercials or Adidas or something, you don’t ever see a bunch of black girls doing anything. You see white people all the time. You don’t see normal people or normal

African-American people that are doing something. They'll have them in a regular commercial for clothes, but where are they in the exercise portion?

For her she believes that this influenced her perception of AA women's participation in PA "Now that I think back on it, it probably did indirectly because I didn't see that growing up."

In the final focus group Paris expresses her frustration about searching for websites that interest her. "I have to put in 'black girls run' because if I put in 'running' I get all types of things and even the images they're all white. I have to put in 'black yogi' to see people that look like me, I just can't put in 'yogi' because the first 200 is a bunch of white women on there. So, you have to go out of your way to look for it.'

Stacy adds a final note stating, "Umm as far as I can gather I mean at least from when I was in high school. Umm again with media, there's a, like a few things such as music videos and um TV shows and things of that nature at least with black women there's kind of a body shape. Like an hour glass figure that a lot of my peers and some of my friends wanted to obtain, whether that was to do a certain amount of physical activity or not."

Unfortunately for this group of AA collegiate women they believe that the perception of AA women in the media is negative, absent or inaccurate. For some of them this has impacted their perception of them as AA women and the role of physical activity. For others, it has fueled them to find positive images in the media via social networks or internet websites. Outside of the social support of family media portrayal has shown to have a direct impact on the perception of how active AA women are.

Environmental Factors

This separate thematic construct looks to explore the various factors within an environment that directly impact behaviors of individuals. Participants were asked specific questions about the college campus environment and the common themes were discovered and finalized based on the

women's consensus on factors that were influential to the decisions they made to engage in PA on campus. In some respects, the women were seeking to find proper representation and inclusion as AA women on campus with regards to PA engagement.

The following themes were created based on the multiple conversations that took place within the focus groups. Participants used words such as “encouraging”, “easy access” and potential when referring to the campus environment and PA support. Other themes emerged based on direct questions asking about the focus group participants views on the type of PA they engage in on campus, obstacles they face on campus and what they would change about the PA environment on campus.

Campus PA Climate

Participants were asked to describe their feelings about the overall campus atmosphere and how or if it was a source of motivation for PA participation in AA collegiate women.

Sharon believes that, “living on a college campus, you can gain a lot of weight. So, I think encouraging physical activity on a college campus, not only for African-American students on campus, but off campus, to encourage healthy eating habits and encourage active lifestyle, I think is really important.” Nicole mentions the following, “um, I would say yes and no cuz, at first it didn't cuz everything was so close. I didn't feel like I had to do anything. but then I was like well, okay, well the gym is here, this fitness class is here, and you know once I started realizing that I did start utilizing it you know more.” Ava had a similar opinion as well, she had the following to say

Yes, definitely, because I think it's easier because of convenience. Even if you don't live on campus you can go in between classes. I know for me, when I have my lazy months, because I'll be on it, and then I'm not. But I know like, okay, when I go back to school I can be right on it because I live in the dorms, I'm right by the gym. Stuff like that, so I think it's definitely encouraging.

Madison says that “we have more access to the gym and then there’s a lot of groups like where you meet new people and it provides more community and social support.”

Other participants felt unsure about the impact the college campus would have on PA engagement for AA women. Heather stated, “I don’t really see that many things that are like ‘hey we really want you to get active’, If I had to judge by walking around campus then today there’s pretty much no sign of that or encouraging people to walk around.” Renee mentions how things could be better on campus,

It could get better. You know with more advertising. We don’t know a lot of things. It’s not out there, they don’t have the signs or flyers or whatever would be available for students to see where you know they’d get the information. Better advertising for us to know what’s going on around campus and what’s available to us and open my availability to exercising.

Finally, Brenda adds in her concerns about how encouraging the campus is for PA engagement. She comments the following,

Well, I think that since it’s a commuter campus that would be the main umm, structural barrier to that. Just cuz people come here just to get their classes done and then leave. Umm but yea other than that, that would be perfect. I think that would be, this would be the best spot it’s in Detroit, it’s a perfect location to reach the targeted group, so yea.

Participants were very clear in how they felt about the climate of the campus when it came to engaging AA collegiate women. While some participants felt that the climate of the campus was encouraging for PA and they felt that they could be more active on campus, others felt that the “commuter” status of the campus did not allow for much encouragement or engagement of students. Overall it seemed that the campus climate was positive and encouraging to this population.

Engaging PA Opportunities

18 out of the 31 participants were unaware of the lifetime fitness activity courses offered through the university and for those who did have knowledge of them they felt that the courses lacked culturally relevant courses, were inconvenient when looking at scheduled times and lacked impactful marketing efforts. However, others had positive experiences with the courses. Riley describes her experience with the LFA courses, “I liked them. I had really good teachers that exposed me to types of working out that I never would have known about. Step and tone was one of my favorites. I sweated so hard in that class and felt so accomplished. Savannah talks about her opinion on LFA “I think they’re great. There’s such a wide variety, like the basketball, swimming, yoga, all of that.”

The majority of women (21 of 30) stated that they participated in PA on campus at the main recreational center/gym. Stacy relies strictly on campus opportunities, “umm the facilities kinda are the only way that I get umm physical activity. I don’t feel comfortable running here yet because I’m not from the area and I don’t know, you know the landscape or the layout. So, in terms of running and using the weights I only use Mort Harris.” In contrast, Heather, who does not use the campus facilities stated, “I don’t like the equipment, the hours and just kind of the environment. The environment is not my environment that I work out in.” Likewise, Sharon explained her reason for not being active on campus,

I do not participate on campus. I live off campus and it’s easier for me to go to the gym down the street from me. And until about a week ago, I didn’t know we had a gym on campus. I came across them online. So, it wasn’t anything that was really put out there for me to know.

To add to the above participant's disclosure about the lack of knowledge regarding PA facilities. Tori discussed her concern about the promotion of PA opportunities on campus by saying the following;

I don't know they could be more effective in terms of bridging that gap. Cuz it's one thing to say oh yea it's a gym right there you know but how do you get in? Where do you start cuz when you walk in its kind of overwhelming if you've never been to a gym before or if you've never done fitness. Like you know, if you don't have a family history of being in athletics or working out than its overwhelming. And it's not really, there's no bridge, no connection for most students I don't think.

Melissa shares her opinion by saying,

They don't promote it (PA opportunities) enough. They don't promote it, I feel for people to do it. Because a lot of people might get to the gym. I haven't used weights yet, I would like to, but I don't even know how to use weights to even have someone teach me. They need to promote things like that because not everyone who goes to the gym knows what they're doing.

Denise, Mia, Ashley, Sophia and Courtney also agree that the promotion of PA opportunities on campus need to improve. Courtney and Mia believe that more types of promotion should take place. Courtney said, "not everyone is going to read a flyer" and Mia said that "direct emails would be better."

Campus Improvements

I also asked the women what the university could do to increase their level of PA on campus. Tiffany stated her need for more options for fitness/group classes on campus, "I might be slacking on my workout, but if I can make this part of my daily routine, I would feel less pressure to go to bed early and get up early. But there are no classes offered after like 2-3pm. Tonya wanted to see more classes that were geared toward hip hop culture and African dance styles. Tonya also wanted to see more creativity in advertisement with a visual presentation. Tonya shared the following suggestion "One thing you could do is go to the student center and promote a class in

an outdoor space. I think when they visually see the class they'll get all the information they need, and you can just pass out a flyer. Make them pay attention to you."

Heather who is a dedicated weight lifter had a few suggestions that would bring her to the campus recreation center to train. She says "In a perfect world more power lifting equipment not just like those tiny resistance bands, deadlifting platforms and weight lifting plates would be nice. All of those things are really encouraging to come here but those are all very, very expensive and specialized equipment, so I don't think that they would do that.". Courtney and Nicole both suggested more dance classes and finding ways to promote classes directly on campus and the university system Academica. Courtney says, "I took a Zumba class and it was fine, but I think we need more things for us, umm you could offer hip hop dance class but hip hop that kind of is not so advanced." Sharon, brought up a way to do promotion to incoming freshman students,

When you're going through new student orientation, maybe there should be someone from the gym. Or somebody who can promote that should be there. I do recall seeing that there was a women's area in the gym. I guess, knowing that there's a separate women's area might cater more to women who don't have a positive body image. Or who just kind of want that more relaxed environment where they don't feel intimidated by others.

Mia who admits to being intimidated by the gym, suggests this "If they were able to run some type of group for people interested in doing it but they're too nervous to, and if they have other people around them that are in the same boat, they're going to feel a little more comfortable." Brenda suggests a partnership "I mean I would say that they should just connect with the Black Student Union cuz I mean that would functionally reach the most people who are interested in pursuing something anyway. Umm cuz a lot of people will sign up for things in the beginning of the semester and not really carry through. but if they connect with an establish hub to reach the target group than I think that might be an official way of reaching AA females."

Cynthia and Karen provide more suggestions for administrators to help increase participation on campus. Cynthia comments "take some of the classes outside just so people can be walking past and see umm those classes going and maybe spark some interest there. Umm I also think it will help if there were more like student orgs that were umm more like focused on being physically active, more running groups. That would definitely help." Karen wants the university to provide a more holistic approach:

Yes, there are things that they could do and it's a thousand percent necessary. Because umm AA women surpass any other demographic with regards to umm stress, diabetes, blood pressure, heart disease. So, uh getting them at their young age is absolutely imperative where they are now because when I was in undergrad this is the time I gained my weight. You know outside of my parents' home, on a budget, a bunch a junk food on campus, staying up late studying. So, I do believe a thousand percent more effort should be put into drawing in, you know the brown community and making sure that umm they're getting those services, especially with regards to nutrition, not just PA. But a lot of us are uneducated about nutrition and so, nutrition is equally if not more important so definitely offering those services.

Other participants suggested "women's only classes" and more direct advertisement to the AA students. Sophia says the following "If I saw a black woman on a flyer, I would probably check out what the flyer is. And if it's like for some gym special or a class that's led by a black lady or man on the flyer, I would probably look into it a little bit more and hopefully find something I like there."

PA opportunities on campus included the perceptions of facilities, classes offered and marketing/advertising. The women's perceptions were diverse when it came to the facilities on campus and their usefulness based on their level of PA experience and their status of residence (on campus or off campus), the perception of the classes currently offered were different because of the knowledge or lack of knowledge of what was offered. The women who were aware of the

courses were able to share more of their opinions about course offerings while those who did not know that the campus offered fitness courses were unable to fully share any pros or cons. All the participants discussed some of the improvements they felt were necessary on campus to engage more AA collegiate women in PA. The differences in their opinions also stemmed from their living arrangements. For those who lived on campus more details about the marketing and need for inclusion were given and fully explained. Also, the women in the preparation and contemplation group had the most to share because of their desire to push themselves to engage in more PA regularly.

Safety

Most of the participants expressed genuine concern regarding their safety on campus when participating in some type of PA. Natalie says “I’m always worried about going out late at night. I feel uncomfortable going around by myself especially when its darker out. I do like working out later at night but then it becomes too scary for me sometimes.” Nicole and Shana discuss how safety has impacted their decisions to be active on campus. Shana states “Sometimes I just can’t do the morning classes and I would love to come in the evening or night time. But I already know that’s a no-no, especially if I have to park my car way over if I can’t pay for parking every day. Or if I decide to ride my bike.” Renee, Melissa and Tonya, live off campus but still have a concern about PA on campus. Melissa says, “I would never, personally, jog around campus.”

While most of them said it was a concern it did not prevent them from engaging in PA, they did mention that they used extra precaution if they were leaving the gym late or early in the morning. Ava states “I do think about safety, but it hasn’t really prevented me from being active, because we’re in a pretty safe environment, for the most part.” Cynthia talks about the types of precautions she takes on campus, “umm I usually travel with my roommate so um I’m usually not

by myself. I feel like if you stay within the campus you just kinda have to know your boundaries.” All participants expressed faith in the campus police and safe areas but did admit to thinking about their safety before engaging in any PA that would involve certain area of the campus.

Section Three: Chapter Summary

The purpose of this chapter was to show a connection between TPB and BFT with the information given by all participants in the focus groups and how it directly relates to PA engagement and their perception.

Attitude was the first construct of TPB discussed in the chapter. The attitudes of the AA collegiate women toward PA was important to explore because it has never been done this explicitly with this population and it also allowed the unique perspective and differences among the participants to provide answers to how this group valued PA. For the most part, the differences among attitudes toward PA was noticed between the groups of women who did not engage in PA regularly compared to those who did. The BFT tells us that because of the various social locations of AA women their viewpoints, experiences and attitudes toward different matters will vary. AA women, like many other women, experience things differently and from a different lens based on things such as socio-economic status, domestic responsibilities, age and family backgrounds. This study shows variation in AA collegiate women’s perceptions of PA.

Environmental Factors, while not an original construct of TPB, acknowledges the importance of the neighborhood environment and environment climate when it comes to PA engagement. The purpose of this study was to understand the perception of PA of AA collegiate women. To better understand this, we needed to know the opinions and experiences the participants had while being on the college campus. There were quite a few factors that influenced the PA participation of AA collegiate women in this study. The participants shared their

experiences with the types of PA opportunities offered and how the lack of clear and direct advertising was an issue when trying to find PA opportunities. Most participants believed that the college campus did offer encouragement and provided a positive climate for PA. This shows that the college campus can be a place to impact the PA engagement of this population. The overall safety of the campus did not seem to be a major impact when it came to participation in PA. All the women involved in the study acknowledged that safety was a concern but that they would still engage in PA on campus.

This group of AA collegiate women all had similar constraints when it came to their intention to be physically active but the reasons behind those constraints varied. Depending on their demographic background, those who worked full time or part time, had children, were care takers of sick family members or full-time students had varying levels of time constraints and a positive perception of being able to overcome this obstacle. All the participants agreed that hair maintenance was an obstacle for them personally or for others that they knew when deciding on engaging in PA. Although it is a clear constraint for the participants, many have found ways to enjoy their hair styles and enjoy PA. Other notable constraints discussed was the lack of appropriate undergarments, access to money and proper nutritional foods and health concerns, both physical and mental. Using the BFT as a framework has allowed the young women to share concerns and obstacles that are distinct to them and no other group.

Subjective Norm, in this TPB construct we seek to understand how the approval or disapproval of a certain activity by a person of influence impacts participation. For this group, the influence of family support, parental support showed to have the most impact on PA engagement. Many participants felt that their parents and family did give them positive support and encouragement in relation to PA participation. Some participants felt that the negative comments

about body appearance from parents had a negative impact on their PA engagement and overall body image. The messages found on various mediums of media left the participants with feelings of conflict. Every participant stated that the messages they receive from media either portray women as having to meet a certain standard to be accepted or fail to place AA women in any context of being physically fit. To add to the confusion, within the AA culture according to the participants it is okay to carry more weight and have curves. For this study, the women involved showed that family, the media and the overall AA community have significant influence on how they view their bodies and how that translates to PA.

Two of the themes of the BFT explore how 1. AA culture is passed down to generations and how it can change and evolve. For these young women, they have been told what an AA woman's body should look like by parents, family members, friends and others in the community. These ideas of what is acceptable has been passed down through generations and they have changed over time. The second theme in the BFT seeks to change the representation of AA women in society. For many of the participants when they took the time to think about how AA women were portrayed in media they found that messages encouraged the idea that AA women are not active unless they are elite athletes.

To change this lack of representation many participants who did engage in PA found websites geared strictly to AA women and PA and used social media to network with other AA women with similar PA interests. Once again, the narrative of a woman who is also AA has many layers to it and causes intersectionality of stereotypes from both aspects of being a woman but also being a minority. The commonalities of both TPB and the BFT theoretical frameworks allowed for a more in-depth approach to learning how this group of women perceive PA and how they chose to participate on a college campus.

CHAPTER 6: DISCUSSION

In this chapter I will highlight the commonalities of the theoretical frameworks, clarify and connect the quantitative and qualitative findings of this study, discuss how the findings impact African American collegiate women and college campuses and breakdown the study limitations and provide guideline for future research.

Commonalities of Theoretical Frameworks

BFT and TPB were selected for this study because they best answer the research questions. More importantly, they are complementary and mutually supportive of one another. BFT seeks to provide definitions or meanings of culture through the eyes of AA women from different social locations. BFT also provides a platform for AA women to express their attitudes and personal experiences that have informed their decisions to engage in various activities. At the same time, TPB looks to determine how behavioral beliefs impact an individual's intention to participate in a certain behavior.

While the theory of planned behavior does not evaluate culture explicitly, normative beliefs, and the influence of valuable people in an individual's life can be cultural specific. Finally, BFT allows AA women to define themselves and accept or reject portrayal of their likeness in society. Perceived behavior controls, the final construct in TPB is the individual's perception of their ability to perform a certain behavior. Using the BFT to explore what types of culturally specific obstacles they may face when attempting to perform PA is very important and necessary. Together these theories provide a way to show how culture, gender and race can influence the behavioral beliefs that relate to intention and engagement.

To explore the relationships between the study variables the Theory of Planned Behavior and the BFT theories were used. TPB purposively examines the intention of an individual to

participate in a certain behavior (Ajzen,1991). TPB contains three behavior centered factors; attitude toward behavior, normative beliefs and perceived behavioral control. These three factors will lead to intent to engage in a behavior (Ajzen, 2006). In addition to the behavioral beliefs of TPB, the environment was also examined as a potential influential factor. The decision to include the environmental factor was based on the IBM (integrated behavioral model) theory. IBM, developed based on TPB, states that environmental constraints should be explored because of its influence on PA engagement. The IBM theory states that in addition to strong behavioral intention, an individual should also have no or few environmental constraints to successfully engage in a behavior. This means that behavior intention alone is not enough to successfully encourage an individual to engage in PA, an individual must have an environment that supports their efforts/intentions to engage in the behavior.

The BFT brings to light the intersectionality of race and gender and provides a platform to bring forth ideas produced by black women that clarify a standpoint of and for black women. With this purpose, the author lists assumptions related to the definition of BFT. With BFT; black women have a unique standpoint on their experiences and certain commonalities of these experiences will be shared by black women as a group. Along with this assumption it is also clear that there is diversity among black women based on age, sexuality, class and other social locations that will shape the expression of these shared themes by the individual.

In the following section I will explain how the findings from this study mutually support the context of the theories used and provide a holistic view of the participation and perception of physical activity held by AA collegiate women in this study.

Discussion of Findings

A sequential data analysis procedure was used to examine the results from this study. The data analysis procedure began with the exploration of quantitative data, followed by the examination of qualitative data and concluded with the analysis of both quantitative and qualitative findings simultaneously. The following section will give a detailed explanation of each step in the analysis process and how it provides significance to this study.

Quantitative Findings

In this study, I measured the physical activity levels of African American collegiate women in various settings and determined what factors were the most influential. The data collected was analyzed using descriptive statistics, correlational analysis and a multiple regression analysis.

Overall, for this population, walking was the main source of PA. Participants spent 600 minutes a week or 128 minutes a day engaging in walking as a PA. This is easily explained due to their status as collegiate students and the amount of walking they do daily on a college campus. Also, many of the participants cited walking as their main form of transportation (38 minutes a day) as well as having a job where it was essential for them to walk through out their mandated shift. The participants were the most active when at work (651 minutes a week) and this includes walking at work (64 minutes a day), doing moderate (47.8 minutes a day) and vigorous (29.7 minutes a day) PA while at work. Outside of the domain of work and walking, performing domestic chores was another category that showed high levels of PA engagement. Participants spent over an hour and a half (114.47 minutes) a week doing chores around the house and yard.

The domain that recorded the least amount of PA participation was using a bicycle as a form of transportation. Participants said that they engaged in 6.8 minutes of bike riding as their transportation within a week. The participants had the highest leisure PA in the category of

walking and the least amount of leisure PA when it came to moderate PA. On a weekly basis the participants engaged in 23 minutes of moderate PA and 32 minutes of vigorous PA. On a daily basis this population had a total of 20 minutes of leisure MVPA. The stunningly low amount of time spent doing leisure MVPA compared to the other sources of PA shows how this population devotes more time to the PA that are a necessity in their lives rather than electing to engage in MVPA in their free time.

It is important to also note that while the findings were reported based on the average results. This group showed significant diversity in PA engagement based on the standard deviations available in table 3. For example, when looking at moderate PA performed in their leisure time, the daily average is 7.9 minutes, however the standard deviation is 19.5 minutes. This is also true for the vigorous leisure PA. The average amount of time spent engaging in this domain of PA was 32 minutes a week, with a standard deviation of 107 minutes and daily average of 12.7 minutes and a standard deviation of 30.9 minutes. The large numbers for the standard deviation show that the participants in this group represent different levels of PA, some are extremely active, and others are extremely inactive. The participants in this study are not localized around one level of engagement of PA, they are represented at all levels of the PA spectrum. This is important to consider when placing a label of active or inactive on a population.

After exploring the physical activity level of AA collegiate women, it was vital to further explore what factors were a direct impact on their decisions to engage in physical activity. To examine this, a multiple regression analysis was conducted. The findings showed that two factors; neighborhood environment, and attitude were significant positive predictors and one factor; perceived behavioral control was significant but a negative factor in predicting AA collegiate women's overall PA engagement. The perceived environmental condition factor is what truly

brings a huge significant piece to this study because this is the first time this factor has been used with this population and within a study that includes both TPB and IBM variables.

The relationship between the neighborhood environment support and the overall PA engagement of AA collegiate women was positive. The results showed that when participants felt that the neighborhood environment support for PA was low, their PA engagement was low and vice versa, when neighborhood environment support was high, their PA engagement was high. This factor was the biggest predictor in PA participation in this study. The results show that the environment should be considered an important factor in understanding AA collegiate women's PA engagement. For this study, the neighborhood environment was centered around the college campus where most of the participants lived during the semester.

Attitude, as explained in previous chapters, is a behavioral belief apart of TPB. The attitude construct seeks to explain how a positive or negative belief about a behavior can impact an individual's decision or intent to engage in that specific behavior. In this study, the attitude (positive or negative) that the participants held was statistically significant in predicting their engagement in PA. Results showed a positive relationship with attitude and PA. As one factor increased or decreased so did the other factor. Attitude was the second largest predictor of PA in this population and study. Attitude was determined by how useful, important and exciting PA was to the participants. A higher ranking of usefulness, excitement and importance or value showed a positive attitude toward PA.

Perceived behavioral control was a negative predictor in determining PA involvement with this population. The TPB states that as individuals perceived ability to overcome obstacles increases, their participation in that behavior will increase, showing a positive relationship among the two. The results of this study violate the assumption of the TPB. To help explain these results,

a further look into the TPB construct was warranted. Hankins, French and Horne (2000) suggest researchers strongly consider sample size when analyzing the TPB with a multiple regression analysis. The authors state that a small power (attributed to a small sample) will increase the chances of a Type II error. With a small sample size in this study, the chances of PBC being significant as a result of a type II error is imaginable. Another study explored the validity of the PBC construct. Conner & Armitage (1998) discusses the synonymous relationship between PBC and self-efficacy previously discussed by TPB author Ajzen.

Conner & Armitage (1998) state that PBC may be combining two different control processes. The control processes are one's belief in being capable to do a certain behavior and one perceived ability to control a behavior. The authors further discuss how Bandura (1992) dispelled any relationship between self-efficacy and locus control. It is also important to note that, there is no current consensus on how to measure the beliefs underlying PBC in individuals (Manstead & Parker, 1995). As suggested in the Conner & Armitage (1998) article, the constructs of the TPB are not unidimensional but multidimensional because individuals having varying perceptions on what factors influence their attitude, norms and most importantly PBC.

The above-mentioned research provides some rationale for the lack of a significant positive relationship with PBC and Total PA. There is no clear TPB survey that outlines how to measure PBC and with the synonymous relationship discussed between the internal and external control, it is possible to assume that individuals may confuse one for the other when answering the questions. Currently published literature explains a clear connection with behavior intent and PBC (Gagne & Godin, 2000, Sniehotta et al, 2014). With this knowledge, it is also important to reiterate that this study was designed to measure the overall total PA of the participants and not intentional leisure

PA. While the results cannot be changed, it is important to understand both sides of the argument with regards to the TPB constructs and their assumptions.

The quantitative findings from this study provided new information about a population that has been scarcely researched in the past. From this study, we now know that for this specific population two factors; Attitude and perceived environmental condition should be considered when examining the PA engagement. While these factors have been suggested and theorized and used within similar settings, using TPB constructs and environmental factors together in a population made up of strictly AA collegiate women are new and should be explored further.

Qualitative Findings

The qualitative data in this study was collected during ten focus groups. In total 31 women were interviewed and shared their perception of PA and the college campus environment. The qualitative part of this study was based upon the foundation of the BFT theory. This theory tells us that AA women have unique standpoints and views and seek to share their stories, history and culture in varying ways but based on the truths they live and not how they are represented by others. Within the BFT it is also important to explain that there is a clear assumption that there is diversity among black women based on social locations such as but not exclusive to class, sexuality, age and domestic responsibilities. These points of diversity will shape the point of views and forms of expression among black women.

The findings that were revealed showed that this group of women carried their own values and viewpoints that ultimately impacted their decisions to be PA. The women were asked to discuss certain factors that may impact their perception and participation of PA. The women who participated in the focus groups were from different social locations and had varying levels of PA over their lifetime. This is what enriched the data, while they were all AA women they all had their

own perceptions that were influenced by other things outside of just their gender and race. The BFT is centered around three themes, however only two themes will be discussed and linked to the study findings.

The first theme that helps define and interpret BFT includes AA women's ability to use self-definition and self-valuation. Self-definition is challenging externally-defined stereotypes of AA women and womanhood. Self-valuation takes place when AA women produce new authentic images of themselves and create their own definition of self. This theme is important when looking at the findings from this study. The women in the focus groups were open and honest about how the media has portrayed them as AA women when the topic is physical activity. In this study, the participations discussed how the portrayal of AA women in the media for them was negative, non-existent or an inaccurate representation. For many of the participants the lack of representation caused frustration when seeking out fitness groups or physically active women who look like themselves.

The women in the focus groups also discussed how growing up or in current time they are unable to see a positive representation of AA women being physically active on TV commercials, TV shows and print magazines. For many of them the lack of representation gave them a false idea that AA woman are not active and has to some extent shaped their attitude toward PA, and its priority status in their lives. For others, the desire to re-define the stereotype of AA women and PA has allowed them to find websites, social media groups and even create businesses that promote physically active AA women.

Participants not only discussed the portrayal of them regarding PA, they also discussed how society has judged them based on their physical appearance and popular standards of beauty. Many of the women felt that compared to other groups of women the bodies of AA women were

judged more harshly even though other groups of women often glorify or seek to imitate similar features. They were able to provide examples of African American pop culture celebrities (Beyoncé) and athletes (Serena Williams) that have been scrutinized, body shamed and degraded because of their natural features, hair styles and body shape/size by the media in contrast to the praise non-AA pop culture celebrities (Kim Kardashian) and athletes (Holly Holm) are given.

Participants felt that the acceptance of various body sizes within the AA race caused confusion for them when deciding to engage in PA. Many of the participants referenced the typical body type for AA women being curvy and having big attributes, and how this body image gives them mixed signals about how their bodies should look. Not only did the women in this study discuss how the flexible body image within their own culture impacts their decision on PA, they also explained their own idea of what an acceptable body image was and for the most part they all agreed that a slender body frame was acceptable. These results show that body image and the idea of what is acceptable is impactful on this community and their engagement in PA and how they view their bodies. The idea of self-defining, challenging the external stereotypes of AA and self-valuation, creating new images of AA, within the BFT is not stagnant and the process of both are constantly revised and always changing as AA grow and change and find ways to properly represent themselves.

The findings are constant with other studies done with African American collegiate students. Molly & Herzberger (1998) found that body image and ethnic identity were key factors in PA engagement for AA collegiate women. In another study (Duncan & Robinson, 2004) using qualitative research methods similar themes were found (media representation and flexible body ideals) related to the perception of PA with this population. This study provides more detailed findings to support already published data, but it also provides new information regarding hair,

their individual perception of acceptable body images and a clear distinction between variables that separate participants and allow them to fully express their own thoughts.

The second theme of the BFT that is central to this study is the importance of AA culture and how black women define, explain and express their perception of their culture. The BFT states that culture can evolve and be expressed in numerous ways. In this study, the expression of culture is discussed based on appearance, interpersonal relationships between AA women and family and social support among friends.

For this population, appearance was very important for them maintenance of their hair and figure. All the participants confirmed that their hair was very important to them, however, based on their level of PA the decision to engage in PA was not solely based on hair maintenance or appearance. Many of the participants who were inactive or who were active but only within the last six months felt that their hair maintenance and preserving a straightened look was a factor in them participating in physical activity. For the women who were active more than six months, hair maintenance was not a concern when engaging in participation. These participants were willing to sweat and engage in PA without their hair being a factor. Many of the participants also discussed how “being natural” or wearing a “natural” hair style allowed them more flexibility in hair maintenance and PA. For them, being able to wear dreadlocks, braids or their hair in its natural curl pattern (no chemical processing) was less stressful and easier to maintain.

The same participants who wore their hair natural did state that when they wanted to straighten their hair they did not engage in PA with hopes to maintain their look longer for personal or even professional engagements. These findings show that AA women have varying standpoints on their hair and how it influences their decisions to be physically active. Appearance and the desire to “look good” was important for some of the participants, being proud of their bodies and

being attractive was another way they expressed what it meant to be a black woman. Keeping the curves and being able to have a slim waist were just two physical traits that the participants felt represented black women and the culture.

Another key finding in this study is the impact that family had on participants' decisions to be physically active. Consistent with the findings from quantitative part of this study, family support for this population was important but did not seriously impact their decision to be physically active. Many of the participants shared their encounters with family members and how conversations about weight gain made them feel self-conscious about their bodies but did not necessarily push them to want to engage in PA. Other participants felt motivated to be active when family members were encouraging and willing to engage in PA with them. These results show promise that family support and feedback may be important for participation PA engagement and body image perception if participants perceive them as positive and motivating. Social support from close friends was discussed as important for this group. Many of the women shared how having friends who supported their desire to engage in PA was encouraging and important. For the women who did not engage in PA, the support and non-judgement from their social circle was also important to them. This is also important because culturally the "sisterhood" or interpersonal relationship among black women is a consistent expression and an impactful connection within the black culture. This study was significant in providing findings that give a more in-depth look into the impact that culture has on the perception and participation of PA.

The findings gathered from the qualitative data provide key information about the views and experiences lived by AA collegiate women and their impact on their perception and participation in PA. The women in the focus groups shared their lived experiences that were true

to them and could only be told by them. For these women their appearance, the influence of family and media were crucial in impacting their decision and their feelings about participating in PA.

Intersectionality of Quantitative and Qualitative Findings

This study combined quantitative and qualitative methods to bring forth findings to learn and begin to understand AA collegiate women's perception and participation in physical activity. In this study, the findings from both methods are mutually supportive of one another. When looking at the quantitative findings, the women who participated in the study indicated that three factors were important in influencing their decisions to be physically active. The factors were attitude, neighborhood environment and perceived behavioral control. The themes derived from the qualitative data show support of the quantitative data.

Attitude

The women spoke openly about their attitudes and feelings about physical activity in their life. The participants discussed their attitudes not only about actual PA engagement but other aspects of their lives that could impact their view about physical activity (body image, hair). The findings showed that the women who were physically active placed a higher value on PA and made it a priority in their daily lives. For the women who did not engage in physical activity or did minimal they found PA to not be important and did not rank it as a top priority in their lives. Regardless of their attitudes toward PA all the women believed that their health was important, and that physical activity would be beneficial to them both physically and mentally.

Perceived Environmental Conditions

The environmental factors discussed with the women in the focus groups centered around their college campus atmosphere and facilities. The quantitative data showed that this factor was statistically significant in predicting PA for this population. The qualitative findings provide more

details about any constraints the college environment may provide for the participants. The women shared mixed views about the college campus being a place of encouragement for African American women to be physically active. Many women believed that the easy access to recreational facilities and PA opportunities did make it inviting, however some women believed that the campus did not directly encourage African American women to engage in PA. As far as the PA opportunities on campus many of the women had positive experiences with the different fitness classes offered while others believed that the college could improve their marketing effort, types of classes and schedule of classes. For the participants feeling connected to the courses, having knowledge of PA opportunities and being able to find suitable times and days for their schedules were all factors in their PA engagement on campus.

Safety was a concern for the women but for those who were physically active it did not stop them from their participation on campus. Many of them had precautions in place already such as going to the facilities at certain times of the day, walking around campus in pairs and just being aware of their surroundings and the campus safe areas. Regardless of their PA level all the women felt that the college campus for them could improve their outreach strategies for AA collegiate women to increase participation for this population.

With the IBM theory explaining the importance of examining environment constraints, the information given by the participants provides some of the constraints AA collegiate women face currently. This is crucial and exciting because it provides a great reference to build upon for future research exploring environmental factors with this population. In conclusion, the qualitative findings were able to provide more in-depth explanation and understanding of what the quantitative data showed.

Perceived Behavioral Control

This factor was not significant in influencing PA participation in AA collegiate women, however the participants shared their most consistent obstacles to PA engagement. It is important to mention that the women who were actively involved in PA did not have any obstacles that prevented them from PA. They were clear in saying that they made every effort to be active because it was a major priority for them. In contrast, for many of the participants that did not have a high level of involvement with PA, their main constraints were lack of time, motivation and lack of resources. Lack of time was the most consistent obstacle, the participants stated that because of their time commitments to courses, course work, jobs and professional development events, it was hard to find time in their schedule to be as active as they would like. In conjunction with lack of time, the varying levels of motivation proved to be a barrier that was often battled with the women.

Low levels of motivation and energy were discussed and attributed the amount of stress they were under to perform and be successful in the classroom and at work. For the participants who lived off campus or who lacked financial support having the proper resources were huge obstacles that were not easily maneuvered. Lack of food and lack of access to facilities or equipment outside of campus kept them from consistent PA engagement also. These constraints are not newly founded within this community; however, it is important to note that despite their specific set of demographics in this study, these types of barriers are seen among different groups of African American women.

The purpose of this study was to do research that would provide key findings for a population of AA women that are not fully represented in studies that explore collegiate women physical activity. This study was able to provide findings that show that this population did meet the basic requirements of leisure physical activity but was extremely active in other areas of PA.

This type of study has never been done with an entire sample of AA collegiate women. With the qualitative findings showing the key factors that influence and deter this population from PA is important to providing a foundation to understand the needs and wants of AA collegiate women. With this population being under represented in research, this study is important for laying down a foundation that can be built upon and explored with further detail.

Subjective Norm

As a quantitative variable, subjective norm was not statistically significant in predicting PA in this population. However, the qualitative data provided information regarding the types of social support and the impact media has on their participation in PA. This variable provides clear rationale for using a mixed methods study to explore PA perception and participation. Without exploring a qualitative aspect for this study, I would not be able to understand the true influences of family support and media portrayal on this population.

Implications for College Campuses

College campuses are vital places for young adults to develop and prepare for their future endeavors. On college campuses they provide housing, medical needs, educational resources and recreational opportunities for students. This environment is not always explored when it comes to the type of PA environment it provides and so this study shows how impactful the college campus can be for students, in particular, AA collegiate women. This study is important because it shows how college administrators, specifically recreational practitioners, can create new strategies and marketing tools to help increase the PA engagement in the student body. Some key strategies that should be taken into consideration for college administrators to help increase PA participation for this population are discussed below.

Connecting with influential minority student groups and departments on campus was a suggestion given during focus group interviews. By forming a relationship with student associations and departments that work directly with minority student would be beneficial because it would provide direct access to the desired population. A relationship would allow for open dialogue and the ability for administrators to share PA opportunities, find direct paths to speak with minority women to learn what they would like to experience and most importantly make this population feel included and visible.

With many of the participants who were new to participating in PA or thinking about starting, having some type of “beginners course” at the different recreational facilities on campus would help to ease anxiety and encourage retention. Many participants expressed the desire to use weights and experience new physical activities but were hesitant because of the lack of knowledge and the feeling of being overwhelmed in a new environment (gym). Scheduling conflicts and time restraints were two major obstacles for the participants and the idea of having more class options (days and times) for fitness classes on campus was extremely appealing or this group. In addition to class schedules, the development of courses that appealed to the dance styles of AA women were frequently discussed. Hip Hop and Ballroom dancing were two popular suggestions for fitness classes. Along with the additional class options, creative marketing initiatives were important for this group. Outdoor classes and random fitness pop up demonstrations could be new ways to promote and recruit more AA collegiate women. Fully understanding the purpose of the class and sparking an interest was important for the participants.

For those who stayed on campus, the idea of having fitness equipment in their dorms or having access to low cost or free PA programs in their dorm common areas was appealing. The participants felt that they would be more motivated to engage in healthy behaviors if they had

unlimited access to the things they needed. The impact of lack of time or lack of resources as obstacles would significantly decrease if participants had 24 access to PA equipment in their dorms and could create a wider social support network with other women.

This study was able to provide tangible findings that can turn into effective strategies to increase engagement in this population. The participants' willingness to speak about how to meet their needs and their eagerness to find ways to be PA on campus are reassuring that this environment can be a motivating factor for AA collegiate students.

Guidelines for Future Research

This study is not without any limitations. The small sample size of AA women was effective yet having a higher sample would have provided more options to use the findings to make a general statement about the population. While the number of women who participated in the focus groups is not a concern for qualitative findings the study cannot be used to make the findings specific to other AA collegiate women. Another limitation of the study is the short amount of time in which the research data was collected. The measures were distributed during the end of one semester and the beginning of another semester, both times are demanding and stressful times for collegiate students. With the IPAQ only measuring the last 7 days for the participants, self-report and the varying schedules of the participants might have influenced the results. It is also important to note that the IPAQ long version may not be as effective in measuring intentional PA with this population. Lastly, it is also worth discussing the challenges to the TPB documented through peer-reviewed research. With research supporting both positive and negative aspects of the theory, properly using the right constructs and TPB questionnaires is important. This study lacked a clear and concise TPB measurement for PBC and intention to engage in leisure PA,

Future studies should seek to build upon this research study by implementing a longitudinal study with objective PA measurements, focusing on AA collegiate women for a full year of college to provide a more accurate picture of their PA engagement. While this was based on an under-represented group of minority women, I would encourage future researchers to explore other minority women in college and employ similar strategies such as using mixed methods to help provide a more vivid picture of the PA behaviors of different groups of women. Future researcher should also look at other colleges and university campuses to seek understanding on how various PA environments and climates impact student PA engagement. In addition to seeking out data collection at other universities, future researchers should explore valid and reliable instruments to properly measure TPB constructs with new populations. Researchers should undertake these studies to find ways to provide practical knowledge that could help practitioners and administrators provide adequate interventions for at risk populations.

This study was able to provide new findings about an at-risk population that can be used to help both participants and college administrators work together to provide an environment that meets the needs of all students on campus. This study is significant because of its exclusive use of an underrepresented group of minorities and the combined use of two highly effective research methods that ultimately provided data that was mutually supportive of one another. While this study was not without its flaws, it has provided information that can and should be used to help push forward research that explores not just AA collegiate women but other minority women in college and other educational settings.

APPENDIX A

Interview Guide

PART I: Focus Group Discussion

Welcome and thank you for volunteering to take part in this focus group. You have been asked to participate as your point of view is important. I realize you are busy and I appreciate your time, the session today should last no more than one-hour. My name is Lauren Scott and I will be the moderator for our group tonight.

Introduction: This focus group discussion is designed to assess your current thoughts and feelings about physical activity and factors that may influence your participation in PA. Is it okay if I record our discussion tonight? Before we start, I would like to remind you that there are no right or wrong answers in this discussion. We are interested in knowing what each of you think, so please feel free to be frank and to share your point of view, regardless of whether you agree or disagree with what you hear. It is very important that we hear all your opinions.

Confidentiality: You probably prefer that your comments not be repeated to people outside of this group. Please treat others in the group as you want to be treated by not telling anyone about what you hear in this discussion tonight. Despite being taped, I would like to assure you that the discussion will be anonymous. The tapes will be kept safely in a locked facility. The transcribed notes of the focus group will contain no information that would allow individual subjects to be linked to specific statements. You should try to answer and comment as accurately and truthfully as possible. If there are any questions or discussions that you do not wish to answer or participate in, you do not have to do so; however please try to answer and be as involved as possible.

General Physical Activity- The first set of questions are about physical activity in general. Let's get started.

1. Could you describe what physical activity means to you?
Probes: Is walking to a bus stop physical activity? Is cleaning the house physical activity?
2. Do you engage (regularly?) in physical activity?
Probes: How often do you engage in physical activity?
3. What kinds of physical activity do you engage in now?
Probes: How often? Where? Why these locations? How did you choose them?
4. What motivates you to engage in PA?
Probes: what are some of the benefits? How do you feel when you cannot engage in PA?
5. Has your physical activity level changed overtime? How?

Probes: Why do you think it has changed over time? (May need to explore some life history or work history here (e.g. children, work, marriage, work, school, caring for elderly or sick family members, etc.).

6. What, most often, prevents you from being active? On a weekday? On a weekend? During the school semester? In the summer? While enrolled part-time? Full-time? May inquire about work schedule (f/t or p/t, commute time)? Is the participant the sole or primary breadwinner?
7. What are some of the strategies you use to work around these obstacles? (For example, a babysitter; rearranging work or class schedule, signing up for different classes on campus, workout in the mornings or evenings, etc.)

Race/cultural factors- The next set of questions are about various factors that may impact PA.

1. When you think about the acceptable women's body, what does that look like? Probes: body shape, weight, make-up, hair, etc. How do your personal ideas of femininity or masculinity influence your ideas of women's bodies?
2. How do you think different groups of women think about their body? What do you think white women think is an acceptable body type/body size? What about black women?
3. What kinds of messages do you think women get about their bodies (by peers, family, media)?
Probes: would you say this is fairly, unfairly, often, semi-frequently, rarely, etc. What do you think is the most important thing for women to do about their bodies?
4. In what ways do think some women are judged more harshly? Probe: why do you think there is this distinction? Do you have any examples? Probe: think about some women who are very visible to the public like Serena Williams, xx, and xx.
5. When you think about the body messages women receive from media, family, friends, etc. (assuming they mention all these), how do you feel you compare?
6. I'd like to talk about hair a little more. How much time do you spend on your hair?
 - a. How important is your hair to you?
 - b. Do you identify with your hair? Or is your hair a part of your identity?
 - c. How much money do you spend on your hair?
 - d. How often do you get your hair done?

- e. What do you have to do (special attention/treatment) with your hair when you engage in physical activity?
7. How else do you think racial culture influences the physical activity of African-American women?
8. What types of messages do you think the media sends out about physical activity and women? What kind of messages specific to: African American women, Latina women, etc. Can you give specific examples?
- Probe: Tell me about a recent social experience or media image that has re-enforced your opinion on physical activity?
9. How does your body shape preference and sex appeal to others influence your decision to be physically active?
10. I'd like to talk a little about your family: Could you describe what their bodies are like? In what ways, do you think they are satisfied with their body type, body size?
11. Do they engage in physical activity?
Probes How often? What types? Where? What times of day? What prevents them from engaging? What helps them participate more often (in your opinion)? Do you participate in activities with them? Why or why not?
12. Was physical activity part of your childhood?
13. When you are going to work out, what are some things your family/friends/sig other might say or do?
Probe: Do they support you/your decision? Do they encourage you? Do they degrade you/your decision?

Campus Environment- The third set of questions are about the campus environment.

1. Do you participate in physical activity on campus?
Probes: Why or why not? How often? Which activities? Why did you choose these? How did you find out about these activities?
2. Do you think that college campuses are great places to encourage and provide opportunities for African American women to be physically active? How so? Give examples. Personal.

3. Have you ever heard of the Lifetime Fitness activity classes offered on campus?
 - a. What do you know about them?
 - b. What are your perceptions of them?
 - c. Who uses them (men, women, different groups, ages)?
4. Are LFA classes or workout classes at the recreation center are designed for the student body? Why or why not?
5. What are your perceptions of the activities offered on campus? Perhaps give examples.
6. Are activities offered on campus culturally relevant?
 - a. Which ones?
 - b. Which ones are not?
 - c. Which ones would you like to see added?
7. Do you think about safety on campus? When? Why? How often? When you're alone? With others? With men? With your bf/husband/sig other?
8. What are some things that school administrators like the recreational director can do to engage more African American collegiate women in physical activities on campus? Give concrete examples.
9. What could the university do to change your level of involvement in activities on campus?
10. What is your opinion about women's only classes?

APPENDIX B**Behavioral Research Informed Consent**

Title of Study: African American Women's perception and Participation of Physical Activity on a College Campus

Principal Investigator (PI): Lauren Scott
Division of Kinesiology, Health and Sport Studies
College of Education
Wayne State University
586-690-5101

Purpose

You are being asked to be in a research study that will examine the perception and participation of the physical activity of African American collegiate women because you fit all of the characteristics and demographic requirements. This study is being conducted at Wayne State University. **Please read this form and ask any questions you may have before agreeing to be in the study.**

In this research study, we will measure the physical activity levels of African American Collegiate women who live on the campus of Wayne State University. In addition to measuring how frequently African American collegiate women participate in physical activities, we will also examine socio-cultural factors that also influence the participation of African American collegiate women.

Study Procedures

If you agree to take part in this research study, you will also be asked to participate in a 30-45-minute focus group to further discuss your perception on physical activity. This focus group discussion is designed to assess your current thoughts and feelings about physical activity and factors that may influence your participation in PA. Some of the questions that I will ask are as follows; “What is your opinion on the various recreational and physical activities that are offered on your college campus?” “How influential is your family when it comes to being physically active?” The focus group will take place in a private setting on Wayne State University’s campus. You have the option of not participating in the focus group and/or not answering any of the questions if you feel uncomfortable.

Your identity on the focus groups will be completely confidential. The use of real name and other personal identifiers will not be used at any moment during the group sessions. All focus groups will be audio recorded and stored in a locked cabinet in a secure and locked location on Wayne

State University's campus. You probably prefer that your comments not be repeated to people outside of this group. Please treat others in the group as you want to be treated by not telling anyone about what you hear in this discussion tonight. Despite being taped, I would like to assure you that the discussion will be anonymous. The tapes will be kept safely in a locked facility. The transcribed notes of the focus group will contain no information that would allow individual subjects to be linked to specific statements. You should try to answer and comment as accurately and truthfully as possible. If there are any questions or discussions that you do not wish to answer or participate in, you do not have to do so; however please try to answer and be as involved as possible.

Benefits

There are no direct benefits to you as a participant in this study; however, the findings of this study may assist colleges and universities in designing more student-centered physical activity opportunities on college campuses in the future.

Risks

Social Risks- To avoid any social risks or identification, participants will receive pseudonyms and all identifiers will be coded and the PI will only have access to the original master list. While a breach of confidentiality is less likely to occur, the PI will take all precautions when using audio recording for all focus groups. The PI cannot guarantee complete confidentiality among participants; however, the PI has clearly stated the importance of maintaining confidentiality among the participants outside of the focus group sessions. Only the PI will have access to the audio recordings and original transcriptions as well as any material with personal identifiers.

Study Costs

Participation in this study will be of no cost to you.

Compensation

You will receive compensation in the form of a \$15.00 gift card to various vendors upon completion of participation in the focus group.

Confidentiality

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. You will be identified in the research records by a code name or number. Information that identifies you personally will not be released without your written permission. However, the study sponsor, the Institutional Review Board (IRB) at Wayne State University, or federal agencies with appropriate regulatory oversight [e.g., Food and Drug Administration (FDA), Office for Human Research Protections (OHRP), Office of Civil Rights (OCR), etc.] may review your records.

When the results of this research are published, or discussed in conferences, no information will be included that would reveal your identity.

Voluntary Participation/Withdrawal

Taking part in this study is voluntary. You have the right to choose not to take part in this study. You are free to only answer questions that you want to answer. You are free to withdraw from participation in this study at any time. Your decisions will not change any present or future relationship with Wayne State University or its affiliates, or other services you are entitled to receive.

The PI may stop your participation in this study without your consent. The PI will make the decision and let you know if it is not possible for you to continue. The decision that is made is to protect your health and safety, or because you did not follow the instructions to take part in the study.

Questions

If you have any questions about this study now or in the future, you may contact Lauren Scott at the following phone number 586-690-5101. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call the Wayne State Research Subject Advocate at (313) 577-1628 to discuss problems, obtain information, or offer input.

Consent to Participate in a Research Study

To voluntarily agree to take part in this study, you must sign on the line below. If you choose to take part in this study, you may withdraw at any time. You are not giving up any of your legal rights by signing this form. Your signature below indicates that you have read, or had read to you, this entire consent form, including the risks and benefits, and have had all of your questions answered. You will be given a copy of this consent form.

Signature of participant

Date

Printed name of participant

Time

Signature of person obtaining consent

Date

Printed name of person obtaining consent

Time

APPENDIX C

Theory of Planned Behavior

I intend to participate in physical activity next month. (behavior intention)

(not at all) 1 2 3 4 5 6 7 (very much)

I am planning to participate in physical activity next month. (Behavior intention)

(not at all) 1 2 3 4 5 6 7 (very much)

Participation in physical activity will be: (attitude)

(useless) 1 2 3 4 5 6 7 (useful)

Participation in physical activity will be: (Attitude)

(unimportant) 1 2 3 4 5 6 7 (important)

Participation in physical activity will be: (attitude)

(boring) 1 2 3 4 5 6 7 (exciting)

My teacher/counselor thinks it is important that I should participate in physical activity:

(subjective norm)

(unlikely) 1 2 3 4 5 6 7 (likely)

Generally speaking, how much do you care what your teacher/counselor thinks you should do?

(subjective norm)

(not at all) 1 2 3 4 5 6 7 (very much)

My Parent(s)/Guardian(s) think it is important that I should participate in physical activity: (subjective norm)

(unlikely) 1 2 3 4 5 6 7 (likely)

Generally speaking, how much do you care what your parent(s)/guardian(s) think you should do? (subjective norm)

(not at all) 1 2 3 4 5 6 7 (very much)

My Friends think it is important that I should participate in physical activity: (subjective norm)

(unlikely) 1 2 3 4 5 6 7 (likely)

Generally speaking, how much do you care what your friends think you should do? (subjective norm)

(not at all) 1 2 3 4 5 6 7 (very much)

My siblings think it is important that I should participate in physical activity. (subjective norm)

(unlikely) 1 2 3 4 5 6 7 (likely)

Generally speaking, how much do you care what your siblings think you should do? (subjective norm)

(not at all) 1 2 3 4 5 6 7 (very much)

64. I can overcome any obstacles or problems that could prevent me from participating in physical activity if I want to. (perceived behavioral control)

(disagree) 1 2 3 4 5 6 7 (agree)

65. It is mostly up to me whether or not I participate in physical activity. (perceived behavioral control)

(disagree) 1 2 3 4 5 6 7 (agree)

APPENDIX D

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE (October 2002)

LONG LAST 7 DAYS SELF-ADMINISTERED FORMAT

FOR USE WITH YOUNG AND MIDDLE-AGED ADULTS (15-69 years)

The International Physical Activity Questionnaires (IPAQ) comprises a set of 4 questionnaires. Long (5 activity domains asked independently) and short (4 generic items) versions for use by either telephone or self-administered methods are available. The purpose of the questionnaires is to provide common instruments that can be used to obtain internationally comparable data on health-related physical activity.

Background on IPAQ

The development of an international measure for physical activity commenced in Geneva in 1998 and was followed by extensive reliability and validity testing undertaken across 12 countries (14 sites) during 2000. The final results suggest that these measures have acceptable measurement properties for use in many settings and in different languages and are suitable for national population-based prevalence studies of participation in physical activity.

Using IPAQ

Use of the IPAQ instruments for monitoring and research purposes is encouraged. It is recommended that no changes be made to the order or wording of the questions as this will affect the psychometric properties of the instruments.

Translation from English and Cultural Adaptation

Translation from English is encouraged to facilitate worldwide use of IPAQ. Information on the availability of IPAQ in different languages can be obtained at www.ipaq.ki.se. If a new translation is undertaken, we highly recommend using the prescribed back translation methods available on the IPAQ website. If possible please consider making your translated version of IPAQ available to others by contributing it to the IPAQ website. Further details on translation and cultural adaptation can be downloaded from the website.

Further Developments of IPAQ

International collaboration on IPAQ is on-going and an *International Physical Activity Prevalence Study* is in progress. For further information see the IPAQ website.

More Information

More detailed information on the IPAQ process and the research methods used in the development of IPAQ instruments is available at www.ipaq.ki.se and Booth, M.L. (2000). *Assessment of Physical Activity: An International Perspective*. Research Quarterly for Exercise

and Sport, 71 (2): s114-20. Other scientific publications and presentations on the use of IPAQ are summarized on the website.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** and **moderate** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal.

PART 1: JOB-RELATED PHYSICAL ACTIVITY

The first section is about your work. This includes paid jobs, farming, volunteer work, course work, and any other unpaid work that you did outside your home. Do not include unpaid work you might do around your home, like housework, yard work, general maintenance, and caring for your family. These are asked in Part 3.

1. Do you currently have a job or do any unpaid work outside your home?

Yes

No →

Skip to PART 2: TRANSPORTATION

The next questions are about all the physical activity you did in the **last 7 days** as part of your paid or unpaid work. This does not include traveling to and from work.

2. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, heavy construction, or climbing upstairs **as part of your work**? Think about only those physical activities that you did for at least 10 minutes at a time.

_____ **days per week**

No vigorous job-related physical activity



Skip to question 4

3. How much time did you usually spend on one of those days doing **vigorous** physical activities as part of your work?

_____ **hours per day**

_____ **minutes per day**

4. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads **as part of your work**? Please do not include walking.

_____ **days per week**

No moderate job-related physical activity → *Skip to question 6*

5. How much time did you usually spend on one of those days doing **moderate** physical activities as part of your work?

_____ **hours per day**

_____ **minutes per day**

6. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **as part of your work**? Please do not count any walking you did to travel to or from work.

_____ **days per week**

No job-related walking → *Skip to PART 2: TRANSPORTATION*

7. How much time did you usually spend on one of those days **walking** as part of your work?

_____ **hours per day**

_____ **minutes per day**

PART 2: TRANSPORTATION PHYSICAL ACTIVITY

These questions are about how you traveled from place to place, including to places like work, stores, movies, and so on.

8. During the **last 7 days**, on how many days did you **travel in a motor vehicle** like a train, bus, car, or tram?

_____ **days per week**

No traveling in a motor vehicle → *Skip to question 10*

9. How much time did you usually spend on one of those days **traveling** in a train, bus, car, tram, or other kind of motor vehicle?

_____ **hours per day**

_____ **minutes per day**

Now think only about the **bicycling** and **walking** you might have done to travel to and from work, to do errands, or to go from place to place.

10. During the **last 7 days**, on how many days did you **bicycle** for at least 10 minutes at a time to go **from place to place**?

_____ **days per week**

No bicycling from place to place →

Skip to question 12

11. How much time did you usually spend on one of those days to **bicycle** from place to place?

_____ **hours per day**

_____ **minutes per day**

12. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time to go **from place to place**?

_____ **days per week**

No walking from place to place →

*Skip to PART 3: HOUSEWORK,
HOUSE MAINTENANCE, AND
CARING FOR FAMILY*

13. How much time did you usually spend on one of those days **walking** from place to place?

_____ **hours per day**

_____ **minutes per day**

PART 3: HOUSEWORK, HOUSE MAINTENANCE, AND CARING FOR FAMILY

This section is about some of the physical activities you might have done in the **last 7 days** in and around your home, like housework, gardening, yard work, general maintenance work, and caring for your family.

14. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, chopping wood, shoveling snow, or digging **in the garden or yard**?

_____ **days per week**

No vigorous activity in garden or yard →

Skip to question 16

15. How much time did you usually spend on one of those days doing **vigorous** physical activities in the garden or yard?

_____ **hours per day**
 _____ **minutes per day**

16. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, sweeping, washing windows, and raking **in the garden or yard**?

_____ **days per week**

No moderate activity in garden or yard → *Skip to question 18*

17. How much time did you usually spend on one of those days doing **moderate** physical activities in the garden or yard?

_____ **hours per day**
 _____ **minutes per day**

18. Once again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** activities like carrying light loads, washing windows, scrubbing floors and sweeping **inside your home**?

_____ **days per week**

No moderate activity inside home → *Skip to PART 4: RECREATION, SPORT AND LEISURE-TIME PHYSICAL ACTIVITY*

19. How much time did you usually spend on one of those days doing **moderate** physical activities inside your home?

_____ **hours per day**
 _____ **minutes per day**

PART 4: RECREATION, SPORT, AND LEISURE-TIME PHYSICAL ACTIVITY

This section is about all the physical activities that you did in the **last 7 days** solely for recreation, sport, exercise or leisure. Please do not include any activities you have already mentioned.

20. Not counting any walking, you have already mentioned, during the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time **in your leisure time**?

_____ **days per week**

No walking in leisure time



Skip to question 22

21. How much time did you usually spend on one of those days **walking** in your leisure time?

_____ **hours per day**

_____ **minutes per day**

22. Think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **vigorous** physical activities like aerobics, running, fast bicycling, or fast swimming **in your leisure time**?

_____ **days per week**

No vigorous activity in leisure time



Skip to question 24

23. How much time did you usually spend on one of those days doing **vigorous** physical activities in your leisure time?

_____ **hours per day**

_____ **minutes per day**

24. Again, think about only those physical activities that you did for at least 10 minutes at a time. During the **last 7 days**, on how many days did you do **moderate** physical activities like bicycling at a regular pace, swimming at a regular pace, and doubles tennis **in your leisure time**?

_____ **days per week**

No moderate activity in leisure time



Skip to PART 5: TIME SPENT SITTING

25. How much time did you usually spend on one of those days doing **moderate** physical activities in your leisure time?

_____ **hours per day**

_____ **minutes per day**

PART 5: TIME SPENT SITTING

The last questions are about the time you spend sitting while at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television. Do not include any time spent sitting in a motor vehicle that you have already told me about.

26. During the **last 7 days**, how much time did you usually spend **sitting** on a **weekday**?

_____ **hours per day**
_____ **minutes per day**

27. During the **last 7 days**, how much time did you usually spend **sitting** on a **weekend day**?

_____ **hours per day**
_____ **minutes per day**

This is the end of the questionnaire, thank you for participating.

APPENDIX E

INTERNATIONAL PREVALENCE STUDY [IPS]
ON PHYSICAL ACTIVITY

Think about the different facilities in and around your neighborhood by this we mean the area ALL around your home that you could walk to in 10-15 minutes.

1. What is the main type of housing in your neighborhood?

- 1 Detached single-family housing
- 2 Townhouses, row houses, apartments, or condos of 2-3 stories
- 3 Mix of single-family residences and townhouses, row houses, apartments or condos
- 4 Apartments or condos of 4-12 stories
- 5 Apartments or condos of more than 12 stories
- 77 Don't know/Not sure

The next items are statements about your neighborhood related to walking and bicycling.

2. Many shops, stores, markets or other places to buy things I need are within easy walking distance of my home. Would you say that you...

- 1 Strongly disagree
- 2 Somewhat disagree
- 3 Somewhat agree
- 4 Strongly agree
- 77 Don't know/Not sure

3. It is within a 10-15-minute walk to a transit stop (such as bus, train, trolley, or tram) from my home. Would you say that you...

- 1 Strongly disagree
- 2 Somewhat disagree
- 3 Somewhat agree
- 4 Strongly agree
- 77 Don't know/Not sure

4. There are sidewalks on most of the streets in my neighborhood. Would you say that you...

- 1 Strongly disagree
- 2 Somewhat disagree
- 3 Somewhat agree
- 4 Strongly agree
- 88 Does not apply to my neighborhood
- 77 Don't know/Not sure

5. There are facilities to bicycle in or near my neighborhood, such as special lanes, separate paths or trails, shared use paths for cycles and pedestrians. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

88 Does not apply to my neighborhood

77 Don't know/Not sure

6. My neighborhood has several free or low-cost recreation facilities, such as parks, walking trails, bike paths, recreation centers, playgrounds, public swimming pools, etc. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

77 Don't know/Not sure

7. The crime rate in my neighborhood makes it unsafe to go on walks at night. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

77 Don't know/Not sure

8. There is so much traffic on the streets that it makes it difficult or unpleasant to walk in my neighborhood. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

88 There are no streets or roads in my neighborhood

77 Don't know/Not sure

9. I see many people being physically active in my neighborhood doing things like walking, jogging, cycling, or playing sports and active games. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

77 Don't know/Not sure

10. There are many interesting things to look at while walking in my neighborhood. Would you say you...

- 1 Strongly disagree**
- 2 Somewhat disagree**
- 3 Somewhat agree**
- 4 Strongly agree**
- 77 Don't know/Not sure**

11. How many motor vehicles in working order (e.g., cars, trucks, motorcycles) are there at your household?

- _____ Motor Vehicles**
77 Don't know/Not sure

12. There are many four-way intersections in my neighborhood. Would you say that you...

- 1 Strongly disagree**
- 2 Somewhat disagree**
- 3 Somewhat agree**
- 4 Strongly agree**
- 88 There are no streets or roads in my neighborhood**
- 77 Don't know/Not sure**

13. The sidewalks in my neighborhood are well maintained (paved, with few cracks) and not obstructed. Would you say that you...

- 1 Strongly disagree**
- 2 Somewhat disagree**
- 3 Somewhat agree**
- 4 Strongly agree**
- 77 Don't know/Not sure**

14. Places for bicycling (such as bike paths) in and around my neighborhood are well maintained and not obstructed. Would you say that you...

- 1 Strongly disagree**
- 2 Somewhat disagree**
- 3 Somewhat agree**
- 4 Strongly agree**
- 77 Don't know/Not sure**

15. There is so much traffic on the streets that it makes it difficult or unpleasant to ride a bicycle in my neighborhood. Would you say that you...

- 1 Strongly disagree**
- 2 Somewhat disagree**
- 3 Somewhat agree**
- 4 Strongly agree**
- 77 Don't know/Not sure**

16. The crime rate in my neighborhood makes it unsafe to go on walks during the day.

Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

77 Don't know/Not sure

17. There are many places to go within easy walking distance of my home. Would you say that you...

1 Strongly disagree

2 Somewhat disagree

3 Somewhat agree

4 Strongly agree

77 Don't know/Not sure

This is the end of the questionnaire, thank you for participating.

APPENDIX F



ATTENTION!
VOLUNTEERS Wanted
for a Research Study

African-American College Women's perception of Physical activity and Participation

African American female participants who are currently enrolled at Wayne State University are all welcome to complete questionnaires (no longer than 15 minutes) and participate in a focus group (location and date given after completion of questionnaires). Compensation is given to those who complete both questionnaires and focus group requirements.

Help us understand what factors influence your participation and perception of physical activity!

Scan here for easy access to study:



Researcher
Lauren Scott
PHD Candidate
Department of Kinesiology,
Health & Sports Studies

Contact
 laurencourtscott@gmail.com

Participants will receive compensation upon full completion of surveys and focus group



APPENDIX G



PARTICIPANTS NEEDED FOR RESEARCH STUDY !!!!!

AFRICAN-AMERICAN COLLEGE WOMEN'S PERCEPTION and PARTICIPATION in PHYSICAL ACTIVITY

Seeking **African-American College women** to complete physical activity questionnaires and participate in a focus group for a study conducted by **Lauren Scott, Kinesiology, Doctoral Student** of Wayne State University.

Questionnaires will require 20 minutes and detailed information regarding focus groups will be discussed with participants individually. All participants are required to complete surveys before participating in focus group.

USE YOUR SMARTPHONE
TO ACCESS SURVEY
HERE:



CONTACT INFO: LAUREN
SCOTT

PHD Candidate Kinesiology,
Health & Sport Studies
laurencourtscott@gmail.com

Surveys can be emailed or
delivered in person

Participants will receive
compensation upon full
completion of surveys and
focus group

APPENDIX H

Email to potential focus group participants

Focus Group for research study on African-American college women's perception and participation in physical activity

Lauren Scott

Thu 5/11/2017 11:26 AM

To: Lauren Scott <eo2920@wayne.edu>;

Good Morning!

Thank you for completing the online survey examining African-American college women's perception and participation in physical activity!!! You are receiving this email because you elected to participate in the focus group that is apart of the study. Below you will find a doodle poll to see your availability for participation.

Please complete the doodle poll and email me if you have any questions or concerns. Once the poll has all of the participants schedule I will email you the address, date and time of the focus group. Once again, participation is completely voluntary and you can opt out at any moment. Upon completion of the focus group all participants will receive a \$15.00 gift card.

<http://doodle.com/poll/ur9tqk3d4g8eixct>

Email to focus group participant to confirm date

From: Lauren Scott

Sent: Monday, April 24, 2017 12:15:56 PM

To: Niyah Riggins

Subject: Focus Group Date

Hello Ms. Riggins,

Thank you for making your availability known for the focus group. Does Monday, May 1st at 11am still work for you? If so, please plan on coming to the address below. If you have any questions or concerns please contact me at 586-690-5101.

Matthaei Building
Room 125 (first door to your left as soon as you walk through the doors)
5101 John C Lodge
Detroit, MI 48313

Gift Card for participants



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ABSTRACT**AA COLLEGIATE WOMEN'S PERCEPTION AND PARTICIPATION IN PHYSICAL ACTIVITY**

by

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Overview: In the United States, adult engagement in physical inactivity has decreased since the implementation of the 2008 PA guidelines. In 2013, only 20% of Americans met the PA recommendations. In 2014, research showed that 23% of adults did not engage in any leisure PA in the United States (U.S Department of Health and Human Services, 2016). In general, females were found to be less active than males from youth through adulthood (Matthews et al, 2007). With research showing women are less active than men, it is important to take a more in-depth look at this population and its subsets. Research has shown that ethnic minorities, such as AA and Hispanic women, are less active than white women (Wilcox, Castro, King, Housemann & Brownson, 2000). Research also revealed that AA women have the lowest levels of PA and over 50% of AA women participate in less than 1 hour of PA per week and only 20 minutes of MVPA (Cowie et al, 1993; Felton et al, 2002; Troiano et al, 2007).

Currently 18 million adults between the ages of 18-24 are enrolled in college in the United States (Fontaine et al, 2011). Collegiate students' levels of PA are not higher than the general population. According to the American College Health Association 21.6% of collegiate students were overweight and 12.5% were classified as obese (American College Health

Association, 2011). In a 2016, the American College Health Association (ACHA) found that only 20.5% of college student reported participation in moderate aerobic PA between 5-7 days a week. Male collegiate students are more physically active than female collegiate students (Buckworth & Nigg, 2004; Keating, et al, 2005) and overall, only 18% of collegiate students engage in PA five or more days a week (Fontaine et al, 2011). Currently there is an abundance of literature focused on PA levels of AA females in urban areas; however, most of this work concentrates on youth in grades kindergarten-12th and populations 35 years old and up (Garcia et al, 1995; Martin et al, 2011) (Felton et al, 2002; Harley et al, 2002). There is not much research on AA collegiate women's PA levels and what antecedents or determinants for PA engagement may exist.

Improving collegiate students' PA levels is a major concern, as studies uncovered that the PA patterns of college seniors continue into their adulthood (Keating et al, 2005, CDC, 2009). It is estimated that nearly 81-85% of adults keep the same PA behaviors they practiced during their senior year of college (Todd, Czyszczon, Carr, & Pratt, 2009, Driskell, Goebel, & Kim, 2005). While college campuses can be a great beacon for shaping PA, there is not enough research illustrating how much of an impact this environment has on this population. The purpose of the study is to examine AA collegiate women's intention and actual PA participation and how their perceptions of cultural and gender identify influence their decision making about PA participation.

Methods: Both Quantitative and Qualitative approaches were explored when collecting data for the current study. 97 AA Collegiate women were recruited from an Urban University during the spring and fall semesters of 2017. Participants completed online self-report surveys measuring physical activity participation, campus environment variables, neighborhood environmental factors and motivation/intention. 31 of the 97 participants volunteered to participate

in focus groups to discuss cultural and environmental factors that influence their perception and decisions to engage in physical activity.

Findings: A multiple regression analysis was conducted to examine the influence the study variables had on participants PA engagement. Participants attitude and neighborhood environment significantly influenced participants PA participation. Analysis of the qualitative data revealed that participants attitudes toward PA were dependent upon their current level of PA, time restraint was the biggest barrier to PA engagement for this population and body image and media portrayal were major cultural influences on perception and participation of PA for AA collegiate women.

AUTOBIOGRAPHICAL STATEMENT

Lauren Scott completed her PhD in Kinesiology from Wayne State University in 2018. While pursuing her PhD Lauren served as a graduate research assistant and a graduate teaching assistant with the department of Kinesiology, Health and Sport Studies. Prior to receiving her doctorate, Lauren earned her Masters in Sport Administration from Wayne State University in 2011 and her Bachelor of Science in Sport Management from Winston-Salem State University in 2006. With over ten years of experience working in the sports industry, Lauren has gained valuable experience in collegiate athletics, youth sports programming and events and championships.

Currently Lauren's research interest includes exploring factors that influence the perception and participation in physical activity of minority college women and body image and athletic identity in female athletes. She holds memberships with various national organizations such as SHAPE (Society of Health and Physical Educators), NASSM (North American Society of Sport Management) and NASSS (North American society for the sociology of sport) and continues to present scholarly research at national conferences.

She is a proud mother of two, Payton 5 and Isaiah 1 and enjoys running, spending time with her family and cooking.