Perceived Outdoor Activity Constraints and Negotiation Strategies in Greenville, NC

by

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July 2017

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Individuals sometimes fail to participate in outdoor activities—to the detriment of their health—as a result of leisure constraints. Constraints are pressures individuals feel when attempting to participate in different activities that limit their full participation. Research suggests all individuals perceive constraints in some form whether they participate or not. The purpose of this study was to determine if there is a relationship between leisure constraints and frequency of participation among individuals and more specifically among different socio-demographic groups in Greenville, North Carolina. Additionally, this study explored which constraint negotiation and agency facilitation strategies have the potential to increase participation frequency in outdoor recreation activities according to respondents' socio-demographic characteristics in Greenville, NC. This thesis accomplishes the aforementioned work by conducting a quantitative survey administered via U.S. mail, door-to-door intercepts and face-to-face intercepts. The survey results suggest that despite a high frequency of participation and lower levels of constraints, agency facilitation and negotiation strategies exist that could be used to increase outdoor activity involvement.

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A Thesis

Presented to the Faculty of Recreation and Leisure Studies

submitted for the requirements of

M.S. Degree

In Partial Fulfillment of the Requirements for the Degree of:

M.S. IN RECREATION SERVICES AND INTERVENTIONS

Concentration: Recreation and Park Administration

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ACKNOWLEDGEMENTS

This study would not have been possible without the generous support and encouragement of my lovely wife, Dr. Erin Frost. Without her kindness and loving help it would not have been possible to complete this study. In addition, I would like to thank my local friends for helping throughout all the process of this study. Their backing and reinforcement are greatly appreciated and will never be forgotten.

I would like to thank all of fellow graduate students and my professors in the Recreation and Leisure Studies Department for helping me in so many ways. I would also like to thank Dr. Kindal Shores, Dr. Nicole Caswell, Dr. Richard Williams and Dr. David Loomis for serving on my committee and providing me with endless advice and encouragement.

Lastly, I would like to thank my family, especially my parents, Bobbi and Tom Frost, for instilling in me a love for outdoor activities. I would never have started or completed this study if it were not for their commitment to take me camping, fishing, and hiking at a very young age.

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Introduction

There has been a trend that indicates a reduction in United States residents' participation in outdoor activities. According to results of the *Outdoor Recreation Participation Topline Report* (The Outdoor Foundation, 2016), approximately 48.4% of the U.S. population participated in at least one outdoor activity in the last year. This figure has been dropping marginally since the organization first started gathering information in 2006 when 49.1% of U.S. citizens participated in outdoor recreation (The Outdoor Foundation, 2016). A similar stagnation in growth was observed in the numbers of outdoor outings in the United States. According to The Outdoor Foundation (2016), visitation numbers have stayed the same starting at 11.6 billion in 2006 to 11.7 billion in 2015, with a few increases and decreases between. This lack of growth in outdoor activities is evident in the Physical Activity Council's (2016) findings, in which participation in outdoor sports remained flat at 48% from 2010 to 2015.

Considering all of the potential benefits of outdoor activity participation, it is puzzling that a majority of the United States' population does not participate in outdoor activities. There seems to be something holding individuals back from participation. An ever-present question in the recreation and leisure field remains: why don't more people participate in physical activity during outdoor activities? What factors deter individuals from participating in these activities? Is it the lack of motivation, constraints, barriers, or the complete lack of interest in these recreational activities or a combination of these things or something else altogether? Attempts to answer this question often rely on the idea of leisure constraints. Constraints are perceived obstacles that inhibit or prohibit an individual's participation and enjoyment in recreational and leisure activities (Jackson, 1991).

The concept of constraints was popularized in the early 1960s under the term, barrier;

however, over the past few decades, the notion of barriers transitioned to the study of constraints. Leisure constraints have been subject to substantial experimental reviews, developments, and examinations (Mowen, Payne, & Scott, 2005). The current study elucidates what constraints individuals most commonly perceive when they want to participate in outdoor recreation activities in the Greenville, NC community.

Early understandings of constraints were rooted in the assumption that constraints were insurmountable in relation to leisure participation (Jackson, Crawford, & Godbey, 1993). This definition evolved over time, but constraints still seem to affect individuals' participation in outdoor activities. According to Jackson et al. (1993), a more modern definition of constraints asserts that constraints are obstacles that usually result in modified participation rather than nonparticipation. Still more recently, Shores, Scott, and Floyd (2007) drew on Jackson and Scott to define constraints as "factors that limit people's participation in leisure activities, people's use of leisure services, or people's enjoyment of current activities" (p. 229). This more complex understanding of constraints can help to explain the many complicated factors that influence (the lack of) participation in outdoor activities.

Research on constraints is intimately connected to recent findings about decreased and stagnant participation in outdoor activities. These findings regarding decreased participation are troubling, because outdoor activities have been shown to improve physiological health and lead to psychological benefits including changes in mental state and mood, education, the development of teamwork skills, sociological benefits, and more (Centers for Disease Control and Prevention, 2015; Driver, Brown, & Peterson, 1991). In their landmark summary, Driver et al. (1991) pointed out that participation in recreational activity reduces individuals' blood pressure level and resting heart rate and also limits the effects of diabetes. The authors also

noted that physiological benefits are only the beginning and that participants in physical activities can reap sociological benefits as well. One sociological benefit is that of social bonding; the authors observed that leisure activities can strengthen a family's bond.

In addition to physiological and sociological benefits, participation in recreational activities has psychological effects and can increase self-image, well being, mental health, and social skills because of the decrease of symptoms of depression and anxiety (Centers for Disease Control and Prevention, 2015; Driver, Brown, & Peterson, 1991). Considering all of these potential benefits associated with outdoor recreation, it is puzzling that a majority of the United States' population is not participating in outdoor recreation.

The purpose of this study was to determine if there is a relationship between leisure constraints and the frequency of participation in outdoor recreation among diverse socio-demographic groups (i.e. age, sex, race, education level, income) in Greenville, NC. This study also looked into the perceived negotiation strategies and agency facilitation strategies that residents prefer to support their participation in recreation outdoors.

Literature Review

Background on Recreation and Leisure Constraints

The shift from discussing barriers to discussing constraints began in the early 1980s when Crawford and Godbey (1987) articulated the idea that barriers affect leisure preferences and participation in three main ways: intrapersonal barriers, interpersonal barriers, and structural barriers. A few years after the proposal of this model, Crawford, Jackson, and Godbey (1991) proposed that the leisure constraint categories of intrapersonal, interpersonal, and structural could create a hierarchical model of leisure constraints. Their proposition was that constraint levels are arranged from most centered to the individual (intrapersonal) to most distant (structural). The model asserts that once an individual passes the intrapersonal constraint of wanting to participate, the potential constraints then become more difficult to surpass. Despite studies that assert the reciprocal and non-hierarchical nature of how constraints are experienced, this foundational understanding of constraints remains a useful organizational typology to understand different types of constraints. The following overview of constraint literature in recreation and leisure studies will discuss constraints within this typology.

Examination of outdoor recreation constraints is a critical area for research; researchers have reported multiple constraints to park visitation and participation (Scott & Mowen, 2010) and have acknowledged that these constraints to outdoor activities depend in large part on the demographic characteristics of potential site users. Common constraints include being too busy with other activities, a lack of time, and being too busy with family responsibilities. Many researchers have identified these by examining single status characteristics (Shinew, Floyd, & Parry, 2004; Philipp, 1995), and complex approaches to examining multiple status characteristics

(Shores, Scott, & Floyd, 2007; Mowen, Payne, & Scott, 2005), though few have done so longitudinally (Child et al., 2015; Mowen, Payne, & Scott, 2005; Spivey & Hritz, 2013).

Association of Race and Constraints

According to Shinew, Floyd, and Parry (2004), studying constraints in relationship to race has broad social implications, not the least of which is better understanding of individuals' choices and prospects for leisure. These authors examined both participants' park use and constraints to their desired leisure activities using a survey questionnaire. Philipp (1995) also used survey methodology and similarly described both the appeal and comfort level in various leisure activities according to socio-demographic factors (age, sex, race, education, income, and family size). Shinew, Floyd, and Parry's (2004) findings indicated that African-American and White park goers significantly differed in their reaction to park use constraints, with Whites feeling more constrained on all 10 park use constraints and on all 10 desired leisure activities. Philipp's (1995) findings demonstrated opposite results with African-Americans feeling more constrained. Both study results observed that the two ethnic groups preferred different leisure activities. Shinew, Floyd, and Parry (2004) noticed African-Americans preferred leisure activities like shopping and going to church, while Whites preferred more nature-based activities. Activities such as camping, going to the beach, going to the zoo, bicycling, dining out, snow skiing, and going to museums were rated lower among African American participants, while activities like fishing, watching television, going to fairs, attending sporting events, and going to the mall were rated higher among the African American contributors in Philipp's (1995) study.

Shores, Scott, and Floyd (2007) and Mowen, Payne, and Scott (2005) conducted studies of multi-status characteristics and constraints, with race being one of the characteristic groups. Mowen, Payne, and Scott (2005) observed that African-Americans respondents were more likely

than White respondents to report fear of crime and no way to get to the parks as their constraints. Shores, Scott, and Floyd's (2007) study noted that race was significantly related to constraints focused on transportation, economics, fear of crime, poor health, and the disapproval of others, with each constraint being more important to African-American respondents than White respondents participating in outdoor activities. Hispanic respondents also reported higher levels of transportation, economic, fear of crime, knowledge, and health constraints compared to White respondents.

Association of Age and Constraints

Much of the constraint literature focuses on a variety of socio-demographic aspects of the population but does not specifically describe age-related constraints. Still, this research can elucidate differences between various age groups. Research by Mowen, Payne, and Scott (2005), Shores, Scott, and Floyd (2007), and Child et al. (2015) provide examples of age-related constraint research. Mowen, Payne, and Scott (2005) examined the change and stability of perceived park visitation constraints over a 10-year window of time. Among other findings, the authors reported that age differences were a predictor of certain recreation constraint items. For example, younger participants reported higher constraints on the items of lack of time, busy with other activities, busy with family responsibilities, pursuing recreation elsewhere and lack of information. Shores, Scott, and Floyd (2007) studied how the combination of status characteristics (e.g., gender, race/ethnicity, age, income, and level of education) affected individuals' constraints to outdoor activities. Their results indicated that individuals with advantage status characteristics (e.g., college educated, white male, under 65, and earning more than $20,000 a year) showed decreased perceptions of constraints compared to individuals with disadvantaged status characteristics. They also observed that the only constraints individuals

younger than 65 reported were time and knowledge of activity. A longitudinal study conducted by Child et al. (2015) also showed that older adults had more knowledge about recreation activities than other study participants.

Spivey and Hritz (2013) conducted a longitudinal study of college students' participation in campus recreational sports. In this study, researchers investigated (a) students' identified benefits and limitations to participation in campus recreational sports, (b) differences between frequent and non-frequent users, and (c) differences between identified benefits and limitations among class designation in college. The two most commonly identified constraints among all college students were a lack of time and lack of fitness equipment.

Young, Ross, and Barcelona (2003) and Masmanidis, Gargalianos, and Kosta (2009) studied how constraints influenced recreational sports participation among college students. Young, et al. (2003) reported lack of time and lack of information about what is available as the main constraints to participation. Masmanidis, et al. (2009) results showed the top four perceived constraints among the participants were lack of accessibility, information, facilities, and partners. It was observed that as individuals on college campuses get older, their perceived constraints of lack of money and lack of transportation decrease in comparison to younger individuals (Young, Ross, and Barcelona, 2003). All the constraints studied were observed to be more significant among non-frequent participants than frequent participants.

Kleiber and Nimrod (2009) and Cardenas, Henderson, and Wilson (2009) examined the physical activity behaviors and constraints of older adults. Kleiber and Nimrod reported that physical limitations (e.g. disabilities, injuries, and pain) were most constraining to study participants, with the majority of the individuals having to change their leisure activity to meet their physical limitations or even quit that activity altogether. Individuals also reported changes

to their leisure activities because of the physical health of loved ones. Some individuals, however, accepted these constraints and continued to participate in the leisure activities but in a different dimension. Cardenas et al. (2009) found that a large population of the individuals studied (*N*= 330) self-reported to be in good to great health. The highest-rated constraints were a lack of time and lack of self-discipline. However, middle old and old old seniors had lower overall constraints when compared to the younger population of older adults (55-64). Both studies pointed to older participants' ability to create adaptions and negotiations to constraints in order to participate in leisure activities to maintain their sense of well-being.

Association of Gender and Constraints

Constraints literature that focuses on gender-based recreational constraints alone is remarkably consistent in that they highlight a fear of crime and greater frequency or intensity of constraints for women when compared to men. Child et al. (2015) conducted a longitudinal study on constraints and the results indicated that women perceived outdoor recreation activities as a safety concern more than men. Mowen, Payne, and Scott (2005) also conducted a longitudinal study from 1991 and 2001, and females also reported fear of crime as one of their main constraints when compared to males. This study also stated that females were more likely than males to report the constraints of being busy with family responsibilities, costing too much, and having no one to go with to the park when compared to males. Following this data trend, Shores, Scott, and Floyd (2007) observed that their sample of female respondents were more likely to state fear of crime as a main constraint to outdoor activities participation.

Association of Income and Constraints

Limited research has examined multi-status characteristics but included income as a variable. Mowen, Payne, and Scott (2005) examined the change and stability of perceived park

visitation constraints over a 10-year window of time. Across this time gap, income remained the best predictor of recreation constraints for respondents. Mowen, Payne, and Scott (2005) and Shores, Scott, and Floyd (2007) noted that in their study, higher income families perceived lack of time as one of the main constraints. Mowen, Payne, and Scott also found higher income families reported being too busy with other activities, family responsibilities, and recreation elsewhere as the main constraints. In contrast, both studies noted that families with lower incomes reported fear of crime, no one to go with, transportation, and parks being too expensive as their main constraints. Shores, Scott, and Floyd (2007) also found disapproval from others as another main constraint, and Mowen, Payne, and Scott uncovered poor health, and parks too far away as other key constraints.

Negotiation of Constraints

Jackson, Crawford, and Godbey (1993) suggested that once individuals face constraints in an activity, those individuals were assumed to not participate. This understanding was evident when constraints were defined as barriers or unbeatable obstacles to participation (Jackson, Crawford, & Godbey, 1993). After reviewing literature, Jackson, Crawford, and Godbey recognized that individuals could negotiate constraints using a variety of strategies. Further, Hubbard and Mannell (2001) pointed out "the strength and effectiveness of negotiation efforts, once triggered, likely also depends on a variety of other factors" (p. 158).

According to Hubbard and Mannell (2001), "encountering constraints appears to directly trigger negotiation efforts that can mitigate the negative effect of the constraints" (p. 158). They also noted that participants who were highly motivated tended to have more success at all stages of participation. The constraint negotiation strategies exhibited by leisure participants can be categorized as two different types: behavioral and cognitive (Lyu & Oh, 2014). Crawford,

Jackson, and Godbey (1991) argued that participation in leisure activities depends on an individual's ability to negotiate through multiple factors in a sequential way that works in concert with their individual momentum through the levels. This applies to the aforementioned hierarchical models of leisure constraints, which has been used to help guide the negotiations of constraints by showing the stages of intrapersonal, interpersonal, and structural that must be overcome before a fitting level of participation can occur.

Another approach to overcome or reduce constraints is the concept of leisure affordances. Affordances were originally developed by Gibson in the late 1970's and were referred to as environmental cues that are conducive to behaviors (Scott & Mowen, 2010; Kleiber, Walker, & Mannell, 2011). They write, "[r]ecognizing and creating leisure affordance is almost always a partner to managing and negotiating leisure constraints" (Kleiber, Walker, & Mannell, 2011, p. 423). Examples of leisure affordances could be the crowd at a local park or the addition of newer playground equipment. However for an actual affordance to occur, there must be some re-designing of the environment. Creating leisure affordances is often misunderstood since affordances are not a result of education, or individuals perceived sensitivity to the environment (Scott & Mowen, 2010; Kleiber, Walker, & Mannell, 2011). However, these strategies are important to consider when trying to increase participation in an environment. One study conducted by Scott and Mowen (2010) combined leisure affordances and education aspects (e.g. providing more information about parks) to create the term "Agency Facilitation Strategies."

Scott and Mowen (2010) studied how park users and non-users might respond to agency facilitation strategies designed to minimize constraints to park use. They found four clusters of infrequent users (time constrained, relatively unconstrained, transportation constrained, and heavily constrained). The researchers reported that members of the time constrained group were

far less likely than the other groups to report that they would visit parks more often if facilitation strategies were implemented. It was also noted that a majority of infrequent visitors did not visit parks as often as they would like, which indicates some interest in visiting parks. There were five constraint mitigation strategies that interested infrequent park users said might help them to use parks more frequently including: a) provide more information about parks, b) more activities provided, c) parks close to home, d) reduced travel time, and e) more public transportation to parks. Mowen, Payne, and Scott (2005) findings also showed there were similar constraint negotiation strategies during longitudinal study. Negotiation strategies including more park information, more activities available, and parks closer to home also appeared in the findings.

Child et al. (2015) conducted a longitudinal study that examined changes in awareness of perceived safety and use of outdoor recreation areas in Sumter County, South Carolina. This region used a physical activity promotion campaign as a type of agency facilitation strategy to increase participation. The outcomes showed an overall improvement in perceptions, awareness, and use of outdoor recreation activities from 2000 to 2011, with older adults and participants with less education being more aware of outdoor recreation activities than other study participants. The findings also reported an increase in awareness over time of outdoor recreation activities but not an increase in facility use, which suggested an increase in awareness may not be enough to increase visits and use of outdoor recreation activities.

Summary

The breadth of knowledge about constraints and their relationship to outdoor activities continues to grow as researchers work to understand how people address constraints. Findings in the literature indicate constraints affect a wide variety of participants and vary greatly depending on an individual's character status. Race, gender, and socioeconomic status may change how

individuals experience constraints. These reviews of constraint literature highlight Jackson's (2005) observation that "no constraint or type of constraint is experienced with equal intensity by everyone" and that "no subgroup of population, and probably no individual, is entirely free from constraints" (p. 7). It is now widely recognized that constraints affect everyone differently depending on individual intrapersonal, interpersonal, and structural limitations. Shores, Scott, and Floyd (2007) observed that leisure participants often have to negotiate multiple constraints in relationship to any given activity; in the same way, status characteristics may combine to further complicate participants' ability to effectively enjoy outdoor recreation activities. In other words, status characteristics sometimes manifest as limitations.

These same limitations may inhibit a person's ability to negotiate constraints. The literature on constraint negotiations has developed from the early 1990s when Jackson, Crawford, and Godbey (1993) created the hierarchical models of leisure and found that individuals do negotiate constraints using a plethora of strategies. Researchers (e.g. White, 2008, Jackson, 2005, Lyu and Oh, 2014) have demonstrated that negotiation of constraints depends on a variety of aspects from self-efficacy, or how an individual feels about their ability to control their actions, to an individual's self identity. However, almost all constraint negotiation studies demonstrate that individuals must overpower multiple levels of constraint before they can participate without feeling excessive pressure. Along with constraint negotiation, agencies (e.g. recreation departments, parks) need to pay particular attention to facilitation strategies to help individuals overcome their personal constraints.

Shores, Scott, and Floyd (2007) suggested, with the growing number of ethnic groups and women outnumbering men, that legislators and other decision makers should spend time thinking about how identity characteristics affect access to public sites for outdoor activity opportunities.

Another strategy was introduced in Mowen et al.'s (2005) study on Cleveland Metropolitan Parks and how park staff tried to help people negotiate constraints by having special events at various parks and creating more parks in the area (e.g agency facilitation strategy).

Purpose Statement and Hypotheses

The purpose of this study was to determine if there is a relationship between leisure constraints and different socio-demographic groups in Greenville, North Carolina. In addition, the study also explored how those constraint factors to outdoor recreation activities were associated with actual participation of individuals in outdoor recreation activities.

Study Hypotheses:

1) There will be a significant inverse relationship between the intensity of perceived leisure constraints and the frequency of participation in outdoor recreation activities.
2) Constraints to outdoor recreation participation will demonstrate group differences according to individuals' socio-demographic characteristics.

Additionally, this study explored which constraint negotiation strategies and agency facilitation strategies have the potential to increase participation frequency in outdoor recreation activities in Greenville, NC. No hypothesis was offered for this part of the study as results were expected to be exploratory and based on localized constraints. A final aim of this study was to describe the constraint negotiation strategies and agency facilitation strategies that may best encourage outdoor recreation participation according to respondents' socio-demographic characteristics.

Methods

Study Design

The original study design was a quantitative survey that was distributed via U.S. mail to 1,600 Greenville, NC residents. This survey was designed to gain an understanding of constraints that might limit frequency of outdoor activity participation and examine constraint negotiation strategies used by individuals. Mailed surveys were initially selected because researchers sought reach both frequent outdoor activity participants and non-frequent participants.

The time frame for mail-design data collection in this study was to be 60 days. This time frame was based on concerns related to response rate of individuals. First, an initial survey packet was sent to sampled households after Institutional Review Board approval was attained. This survey packet followed methods from the Dillman "Tailored Design Method" and included a respondent-friendly survey with a personalized cover letter to each participant. The cover letter explained the purpose and importance of the study, who should complete the survey, and their entrance into a random drawing of one of ten $50 gift cards to Wal-Mart for completion of the survey (Dillman, 2000). The survey packet also included a postage paid envelope to return the questionnaire. Following the initial survey, the researcher sent out a thank you postcard five days after the original survey packet was sent out. This postcard served as both a thank you for participating and an indicator of the hope that uncompleted questionnaires will be returned (Dillman, 2000). The researcher then monitored returned surveys using prior coded numbers for each respondent, allowing the researcher to identify the participants who returned the surveys and those participants who required a follow-up survey. To improve the response rate, the researcher sent out a follow-up packet two to three weeks after the initial survey (Dillman, 2000;

Babbie, 2013). This follow-up packet included the original survey with a cover letter resembling the original cover letter with an additional explanation of the importance of the study. The follow-up surveys that were returned, had any been available to the researcher, would have been entered and coded the same as the initial surveys. In an effort to maximize the response rate, a third follow-up survey packet would have been sent to the remaining non-responders two to three weeks after the first follow-up packet (Dillman, 2000).

As is so often the case with research, deviations from the plan were unavoidable. The study design above was corrupted as a result of the loss of approximately 300 returned surveys. Due to these lost surveys, a new study design was created. In this study design, a quantitative survey identical to the original was distributed via face-to-face intercepts in Greenville, NC. This survey was used to gain an understanding of constraints that might be limiting frequency of outdoor activity participation and examine constraint negotiation strategies used by individuals. Intercept surveys were collected via both on-site and door-to-door in an attempt to reach both frequent outdoor activity participants and non-frequent participants. Data collection was conducted on weekends and during evening hours at randomly selected locations throughout the Greenville area. The door-to-door intercepts were randomly selected based around street names in order to collect data on non-users. Face-to-face intercepts were used in Greenville, NC parks and greenways to focus on users of the outdoor physical activity areas. During both face-to-face and door-to-door intercepts, the same survey tool was used. The objective was to collect approximately 300 completed surveys during the study. This phase of data collection lasted two months.

Study Area

Data for this study was collected in Greenville, North Carolina. Greenville is a midsized

city located in a rural area of Eastern North Carolina, with a U.S. Census estimated population of roughly 89,852 residents (2014). Based on the U.S. Census, the population of Greenville consists of 54% female residents, with a median household income of $35,225 and 37.9% of individuals 25 years of age or older have a bachelors or higher degree. Greenville has a larger population of White alone residents (56.3%) compared to Black/African American alone residents (37%).

Population and Sampling

To examine the research questions in this cross-sectional study, data were collected using a convenience sample. Data were collected in three ways. First, mail surveys were delivered to already designated addresses. The random sampling of participants' addresses was selected from a list of Geocoded tax records from the County Planners office. The participants of the study were selected based on property values to better represent the diverse income populations of Greenville, NC. The second collection style was face-to-face intercepts that were conducted on designated streets and on site at Greenville Recreation facilities. The researcher visited local Greenville parks in the evening and on the weekends to collect survey data. The researcher also collected surveys using door-to-door intercepts on preselected streets and in neighborhoods in Greenville, NC. The researcher verified verbally that the participants were over the age of 18. A cover letter also accompanied the survey to clarify that an individual over the age of 18 should complete the survey. The cover letter also described the purpose of the study, gave contact information for the researcher, and information about Institutional Review Board approval.

Operationalization/Measurement

The survey began with questions meant to intrigue the participants and hopefully increase the participation rate. The first few questions were designed to apply to everyone, be easy to

answer, and be interesting to the participants (Dillman, 2000). The survey also included a measure of outdoor activity participation frequency. This measure was a modified version of the survey items used by Mowen, Payne, and Scott (2005) in their study of constraints. The survey asked participants to identify their frequency of participation in outdoor activities at Greenville facilities and also other outdoor places (e.g. hiking, sports, camping, park visits). Their options consisted of: (a) don't participate, (b) participate once or twice a year, (c) participate less than once a month, (d) participate about once a month, (e) participate about once a week, and (f) participate almost every day. The survey also included measures to determine the types of outdoor activities respondents preferred as well as a section to indicate what facilities they have visited in Greenville, North Carolina in the past year.

The next measure assessed recreation and leisure constraints. The survey included 22 recreation and leisure constraint variables. Each item was measured on a five-point Likert-type scale, with one representing "strongly disagree" and five representing "strongly agree." Study participants were asked to indicate their level of agreement with reasons that limit their outdoor recreation participation. The list of leisure constraint items was adapted from previous research on recreation and leisure constraints (Lyu & Oh, 2014; Mowen, Payne, & Scott, 2005; White, 2008). The Cronbach alpha scores from these studies were only reported in Lyu & Oh (2014) with scores ranging from 0.62 to 0.86. Examples of the recreation and leisure constraint items include: too busy with other activities, not enough time, lack of information, not enough money, and fear of crime. Higher scores on the scale indicate that participants perceive the constraints as more limiting.

Another set of questions measured constraint negotiation strategies and agency facilitation strategies. The constraint negotiation strategy items asked participants to identify

their agreement with each statement of strategies people use to overcome the constraints or obstacles they face to participate in outdoor activities. The agency facilitation strategies items asked participants to identify their agreement with things the public park system could do that might help them participate more frequently in outdoor recreation. Both measurements were on a five-point Likert-type scale with one being "strongly disagree" and five being "strongly agree." The list of constraint negotiation strategy items was adapted from previous research (Lyu & Oh, 2014; White, 2008). The Cronbach alpha scores from these studies were only reported in Lyu & Oh (2014) with scores ranging from 0.82 to 0.86. There were 15 constraint negotiation strategies and 12 agency facilitation strategies that were examined. Examples of the constraint negotiation strategies items included in the survey consisted of the following: try to budget money, set aside time for outdoor recreation activities, find people of similar interests, change time of activity, and find areas closer to home. Examples of the agency facilitation strategies items included in the survey include the following: making parks closer, making parks safer, providing more information about parks, and providing more activities. Higher scores indicate that participants perceive the negotiation strategy and agency facilitation strategies will be effective.

The final measure included questions pertaining to socio-demographic characteristics including age, gender, race, education level, and income. These measures varied from nominal measures to ordinal/interval measures of the study. Age was measured as an interval value with respondents being asked to provide their birth year. Gender was measured as a nominal variable with the participants being asked, "What gender do you most closely identify with?" and offering the categories male or female. Race was also a nominal variable and followed approximately the same categories as the U.S. Census (2014) data representing Greenville, NC (i.e. White alone, Black/African American alone, Asian alone, Hispanic, Two or more races, and other).

Education level was an ordinal measure with participants identifying the level of education they have completed (no high school diploma, high school diploma, some college but no degree, Associated Degree, Bachelors Degree, Higher than a Bachelors Degree). Income was measured using ranges based on previous studies (less than $20,000, $20,000-$39,999, $40,000-$59,999, $60,000-$79,999, $80,000-$99,999, $100,000-$119,999, $120,000-$139,999, $140,000 or more) (Mowen, Payne, & Scott, 2005).

Data Analysis

Data analysis utilized IBM SPSS software. Descriptive statistics were used to summarize respondents' socio-demographic characteristics (i.e. age, gender, race, education level, and income). Respondents' demographic characteristics were then identified as individual differences variables in paired 't'-test, ANOVA, and correlation analyses to understand how personal characteristics were related to their reported participation frequency, perceived constraints, agency facilitation strategies, and constraint negotiation strategies for this sample of respondents.

To address the first hypothesis, "There will be an inverse significant relationship between the intensity of perceived leisure constraints and the frequency of participation in outdoor recreation activities." the leisure constraint scale was reduced to five factor domains using exploratory factor analysis (principal components procedure). A six factor solution was entered a priori and tested for fit. Following iterative analysis of factor scores and factor reliability scores, identified constraint factors were saved as regression variables. A correlation analysis was then conducted to compare saved constraint factors and respondents' frequency of participation.

To address the second hypothesis, namely, that socio-demographic status will be significantly associated with respondents' perceived constraints to outdoor recreation participation, additional group differences and correlation tests were undertaken.

Finally, the researcher explored how constraint negotiation strategies may best encourage outdoor recreation participation according to socio-demographic characteristics. Descriptive statistics describe the relative importance of negotiation strategies and agency facilitation strategies according to respondents' as a group and according to socio-demographic characteristics. This addresses the third goal of the study that was to explore which constraint negotiation strategies have the potential to increase participation frequency in outdoor recreation activities in Greenville, NC. Exploratory factor analysis was again undertaken for the constraint negotiation scale and failed to yield meaningful domains with statistical separation. As such, individual items that were deemed most important to respondents were selected for analysis. Exploratory factor analysis of the agency facilitation strategy scales allowed four factors to emerge for group comparison analysis. Similar to the analyses of constraint factors, each socio-demographic variable was entered as the independent variable while each agency facilitation strategy and constraint negotiation variable was entered as the dependent variable in turn.

Results

Characteristics of Respondents

Data collection yielded a total of 129 completed surveys. Among the respondents who completed the survey, 60.7% reported renting in Greenville, NC, and 33.6% reported owning their property. Another 5.7% of those who responded reported visiting Greenville from surrounding cities or towns. The number of years that respondents had lived in Greenville ranged from less than one year (1.7%) to 52 years (0.9%). The majority of participants (67%) reported living in Greenville for 10 or fewer years, with only 10.4% of respondents reporting living in Greenville for more than 25 years. When asked to report what gender they identified with, 57.7% identified themselves as female and 42.3% self-reported identifying as male. Respondents' ages varied from 19 years old to 84 years old with the mean age at 27.5 years of age. The majority (59.2%) of the respondents were 30 years of age or younger. Approximately seven in ten (71.8%) of the respondents identified as White race, with 16.9% reporting as Black/African American race. Hispanic ethnicity respondents comprised 4% of the sample and two or more race also made up 4%, and 2.4% respondents identified as Asian. One individual self-identified as simply "American" using the space left blank for other responses. Participants reported a wide range of incomes. Approximately 30% of the respondents reported earning less than $20,000 per year, and 20% reported earning a yearly income between $20,000-$39,999. Another 16.7% reported making $40,000-$59,999, and 11.7% reported a yearly income of $60,000-$79,999. Approximately 21.8% of the respondents reported a yearly income of $80,000 or greater. Education levels ranged from 3.2% reporting High School (no diploma) to 19.4% reporting higher than Bachelor's Degree. The majority of respondents reported some college but no degree (29%) and Bachelor's Degree (28.2%). Complete results are summarized in Table 1 below.

Table 1: Descriptive Statistics for Demographics

Characteristics of Respondents	n	Percent
Gender		
Male	52	42.3%
Female	71	57.7%
Race/Ethnicity		
Black/African American	21	16.9%
White	89	71.8%
Asian	3	2.4%
Hispanic	5	4.0%
Two or more races	5	4.0%
American	1	0.8%
Education Level		
High School (No Diploma)	4	3.2%
High School (Diploma)	10	8.1%
Some college but no degree	36	29.0%
Associate's Degree	15	12.1%
Bachelor's Degree	35	28.2%
Higher than Bachelor's Degree	24	19.4%
Income		
Less than $20,000	36	30.0%
$20,000-$39,999	24	20.0%
$40,000-$59,999	20	16.7%
$60,000-$79,999	14	11.7%
$80,000-$99,999	8	06.7%
$100,000-$119,999	5	04.2%
$120,000-$139,999	5	04.2%
$140,000 or more	8	06.7%

Respondents Outdoor Activity Participation

When asked how often they visit local parks and outdoor activity facilities in Greenville, NC roughly a quarter (27.9%) of the respondents reported visiting more than once a week. The second highest frequency of participation at local parks or facilities were those who visited about once a week (23%). Only 7.4% of respondents reported not visiting local parks and facilities at all in Greenville. When asked about participation in outdoor activities in other places in Greenville, it was observed that 20.5% of respondents visit about once a month and 22.1% reporting not visiting other places. It was reported that 18.9% visited more than once a week and 17.2% reported visited about once a week. The respondents where asked to identify which local

facilities they visited in the past year, the majority reported visits to Town Commons (61.2%) and Elm Street Park (43.4%) in the past year, followed by River Park North (38%) and Greensprings Park (20.2%). There were twelve parks or outdoor facilities that were reported to be visited by fewer than 10% of study respondents. When asked to identify the top five activities the respondents most often participate in the highest reported activity was "Walking" (17.9%), followed by "Running/Jogging" (9.8%) and "Visiting Dog Park" (8.50%). The activities with the lowest reported participation were Tennis (1.6%), followed by Picnicking, Boating, and Golf each with 2.5% of respondents identifying these activities.

Constraints

Respondents were next asked what constraints might be limiting their participation in outdoor activities and respondents were given a list of 22 common constraints used in previous studies. They were asked to rate whether these constraints affected them on a scale from 1-5 with 1 representing "strongly disagree" and 5 standing in for "strongly agree". The mean scores and standard deviation of all constraints are listed in Table 2 below. The constraints with the highest mean scores are "I'm too busy with work, school, or family" (*M*= 3.22, *SD*=1.27), "I'm busy with other activities" (*M*= 3.16, *SD*=1.23), and "I don't have enough time" (*M*= 3.10, *SD*=1.23). Within the constraint of "I'm too busy with work, school, or family," 37.5% reported agree, and an additional 11.7% reported strongly agree. The constraint of "I'm busy with other activities," 40.2% reported agree and 6.3% reported that they strongly agreed. For the constraint "I don't have enough time," 26.6% reported agree and an additional 10.2% strongly agreed. The constraints with the lowest mean were "My health is too poor to visit parks" (*M*= 1.57, *SD*= .73), "I have no way to get to the park" (*M*= 1.63, *SD*= .85), and "I don't do things outdoors" (*M*= 1.71, *SD*= .91). Within the constraint "My health is too poor to visit parks," 38.6% disagreed and

an additional 53.5% strongly disagreed. In the constraint "I have no way to get to the park," 38.3% reported disagree and 52.3% reported strongly disagree. Within the constraint of "I don't do things outdoors," 38.3% disagreed and 49.2% reported strongly disagree.

Table 2: Descriptive Statistics for Constructs

My participation in outdoor recreation is limited because…	Mean	S.D.
I'm too busy with work, school, or family	3.22	1.27
I'm too busy with other activities	3.16	1.23
I don't have enough time	3.10	1.15
I like to do other things for recreation	2.99	1.18
My friends prefer to do other things	2.84	1.06
I lack information about activities	2.65	1.31
I don't know where to get park information	2.57	1.29
Of poor weather conditions	2.49	1.07
I'm too busy with other recreation activities	2.43	1.12
I'm afraid of crime	2.16	1.20
My family lacks interest	2.08	.91
I don't have enough money	2.07	1.06
I don't have a partner(s)	1.96	1.03
Park facilities are not well maintained	1.96	.81
My local parks are too far away	1.91	.95
I lack the self-confidence to participate	1.80	.92
Rules and regulations are too restrictive	1.77	.69
I don't have the skills needed to participate	1.77	.87
No low cost public facilities are available	1.75	.82
I don't do things outdoors	1.71	.91
I have no way to get to the park	1.63	.85
My health is too poor to visit parks	1.57	.73

Agency Facilitation Strategies

When asked what strategies could be implemented by others that might help increase their frequency of participation, respondents were given a list of 12 facilitation strategies that were used in previous studies. They were asked to rate these strategies from 1-5 with 1 representing "strongly disagree" and 5 standing in for "strongly agree." The mean scores and standard deviation of all strategies are listed in Table 3 below. As shown in the table, the mean scores clustered between 2.30 and 3.65. The highest mean scores for strategies were "Providing more information about existing parks and programs" (*M*= 3.65, *SD*=1.13), "Offering more programs in local parks" (*M*= 3.62, *SD*= 1.20), and "Increasing development of parks" (*M*= 3.42, *SD*= 1.24). Looking deeper in the findings it was observed that 46.5% agreed with the strategy of "Providing more information about existing parks and programs" and 20.9% strongly agreed. In the strategy of "Offering more programs in local parks," 51.2% reported agree and an additional 17.1% reported to strongly agree. The strategy of "Increasing development of parks," 45.7% agreed and 16.3% strongly agreed. The lowest strategies included "Reducing development of parks" (*M*= 2.30, *SD*= 1.08), "Reducing costs associated with going to parks" (*M*= 2.49, *SD*= 1.14), and "Reducing costs associated with participation" (*M*= 2.57, *SD*= 1.24). Within the strategy of "Reducing development of parks," 38.3% reported to disagree and 24.2% strongly disagreed. The strategy of "Reducing costs associated with going to parks," it was noted that 39.8% disagreed, and 18.8% reported to strongly disagree. In the strategy of "Reducing costs associated with participation," 32.6% reported to disagree, and 21.7% strongly disagreed.

Table 3: Descriptive Statistics for Agency Facilitation Strategies

Strategies that might help increase frequency of participation include…	Mean	S.D.
Providing more information about existing parks and programs	3.65	1.13
Offering more programs in local parks	3.62	1.20
Providing more activities	3.49	1.23
Increasing development of parks	3.42	1.24
Developing parks closer to home	3.36	1.16
Making parks safer	3.19	1.31
Reducing travel time to parks	3.02	1.20
Providing more public transit	2.98	1.27
Reducing crowding	2.86	1.26
Reducing costs associated with participation	2.57	1.24
Reducing costs associated with going to parks	2.49	1.14
Reducing development of parks	2.30	1.08

Negotiations

When asked what negotiation strategies they might use to help increase participation in outdoor recreation, the respondents were given a list of 16 negotiation strategies that were included as potential mitigators in other studies. They were asked to rate these strategies from 1-5 with 1 representing "strongly disagree" and 5 standing for "strongly agree". The mean scores and standard deviation of all negotiation strategies are listed in Table 4 below. As seen in the table all mean scores except one ("Ask for help with certain skills") were above 3.00. The highest mean scores for negotiation strategies included "Set aside time for activity" (*M*= 3.84, *SD*= .99), "Find information about recreation activities" (*M*= 3.67, *SD*= 1.09), and "Push myself harder to participate" (*M*= 3.63, *SD*= 1.07). Within the negotiation strategy of "Set aside time

for activity," 57.7% agreed and 21.1% strongly agreed. For the negotiation strategy of "Find information about recreation activities," it was reported that 52% agreed and 18.7% strongly agreed. In the strategy of "Push myself harder to participate," 50.4% reported to agree and 17.1% strongly agreed. Even though these strategies had the highest mean scores other strategies had a majority of the respondents reported agree or strongly agree with the strategy (i.e. "Try to find people with similar interests" (69.1%), "Learn more about locations of outdoor recreation areas" (68.3%), "Try to learn new activities" (71.3%), and "Find areas where I feel comfortable" (62.6%)). The lowest mean negotiation strategy scores reported is "Ask for help with certain skills"(*M*= 2.89, *SD*=1.12), "Try to budget money for activities" (*M*= 3.03, *SD*= 1.05), and "Drop other non-important obligations" (*M*= 3.05, *SD*= 1.11). The strategy of "Ask for help with certain skills" had 17.9% disagree and 15.4% strongly disagree. In the strategy of "Try to budget money for activities," it was reported that 18.7% disagreed and 10.6% strongly disagreed. Within the strategy of "Drop other non-important obligations," 21.3% reported to disagree and an additional 10.7% strongly disagreed.

Table 4: Descriptive Statistics for Negotiations

To start of increase my participation in outdoor recreation, I could…	Mean	S.D.
Set aside time for activity.	3.84	.99
Find information about recreation activities.	3.67	1.09
Push myself harder to participate.	3.63	1.07
Try to find people with similar interests.	3.59	1.05
Try to learn new activities.	3.57	1.12
Learn more about locations of outdoor recreation areas.	3.54	1.15
Find areas where I feel comfortable.	3.42	1.13
Find areas closer to home.	3.31	1.13
Change time of activity participation.	3.24	1.05
Find inexpensive activities.	3.24	1.16
Find areas that are less crowded.	3.24	1.13
Find areas that are safer.	3.17	1.23
Drop other non-important obligations.	3.05	1.11
Try to budget money for activities.	3.03	1.05
Ask for help with certain skills.	2.89	1.12

Results of Factor Analyses

Factor analyses were used to determine clusters of constraints, agency facilitation strategies, and constraint negotiations. Factor analysis on the 22 constraint items produced five distinct categories of factors. Of the original 22 constraint items only 15 were retained. The seven items removed either cross-loaded on multiple factors or did not meet the acceptable factor loading value of 0.3 and above. The fifteen items that remained formed five conceptually distinct categories of factors labeled as *lack of time, confidence, lack of resources, lack of interest, and park locations* (Table 5). These factors were saved as regression scores which

allows the relative importance of each factor to be retained in the final interval value used for further analysis. The *lack of time* factor cluster included three constraint items. These items were "too busy with other activities", "I don't have enough time", and "I'm too busy with work, school, or family". *Confidence* factors included "I don't have a partner", "I don't do things outdoors", "I don't have the skills needed", and "I lack the self-confidence to participate". Three items loaded under *lack of resources*. These items were "I lack information about activities", "I don't know where to get park information", and "I don't have enough money". The constraint items factored into the *lack of interest* factor were "I like to do other things for recreation", "my friends prefer to do other things", and "I'm to busy with other recreation activities". The last factor of *park location* included two constraint items. These items were "my local parks are to far away" and "I have no way to get to the park".

Cronbach alpha reliability tests were conducted on all five-constraint factors to test the internal consistency of the constraint categories. Alpha scores were generated for the five factors and an alpha value of 0.60 or greater was used to determine acceptability. Cronbach alpha ranged from 0.66 to 0.88 and were determined acceptable. The *lack of time* factor had the highest Cronbach alpha of 0.88. It was followed by the factor *lack of resources* at 0.75. The lowest alpha value was *lack of interest* at 0.66. Cronbach alpha values for all five factors can be found on Table 5.

Table 5: Factor Analysis of Constraints

	Mean	Factor Loading	Alpha
Lack of Time			0.88
I'm too busy with other activities	3.16	0.91	
I don't have enough time	3.10	0.89	
I'm to busy with work, school, or family	3.22	0.77	
Confidence			0.74
I don't have a partner	1.96	0.62	
I don't do things outdoors	1.71	0.75	
I don't have the skills needed to participate	1.77	0.74	
I lack the self-confidence to participate	1.80	0.76	
Lack of Resources			0.75
I lack information about activities	2.65	0.79	
I don't know where to get park information	2.57	0.83	
I don't have enough money	2.07	0.70	
Lack of Interest			0.66
I like to do other things for recreation	2.99	0.76	
My friends prefer to do other things	2.84	0.73	
I'm to busy with other recreation activities	2.43	0.69	
Park Location			0.71
My local parks are to far away	1.91	0.78	
I have no was to get to the park	1.63	0.76	

Items not included: My family lacks interest, Of poor weather conditions, I'm afraid of crime, no low-cost public facilities are available, my health is too poor to visit parks, park facilities are not well maintained, rules and regulations are to restrictive

Exploratory factor analysis on the 12 agency facilitation strategy items produced four distinct categories of factors. Of the original 12 facilitation strategy items only eight were retained. The four items removed either cross-loaded on multiple factors or did not meet the acceptable factor loading value of 0.3 with an eigenvalue of 1.0 or higher. The eight items that remained formed four distinct categories of factors labeled as *cost facilitators, facility facilitators, location facilitators, and information facilitators* (Table 6). As before, these were saved as regression variables. The *cost facilitators* factor cluster included two agency affordance items. These items were "reducing the cost associated with going to parks", and "reducing the cost associated with participation". *Facility facilitators* factor included "increasing development of parks", and "offering more programs in local parks". Two items loaded under *location facilitators*. These items were "developing parks closer to home", and "reducing travel time to parks". The facilitation strategy items factored into the *information facilitators* factor were "providing more information about existing parks and programs", and "providing more activities".

Cronbach alpha reliability tests were conducted on all four facilitation factors to test the internal consistency of the agency facilitation strategy categories. Alpha scores were generated for the four factors and an alpha value of 0.60 or greater was used to determine acceptability. Cronbach alpha ranged from 0.73 to 0.92 and were determined acceptable. The *cost facilitators* factor had the highest Cronbach alpha of 0.92. It was followed by the factor *location facilitators* at 0.82. The lowest alpha value was *facility facilitators* at 0.73. Cronbach alpha values for all four factors can be found in Table 6.

Table 6: Factor Analysis of Agency Facilitation Strategies

	Mean	Factor Loading	Alpha
Cost Facilitators			0.92
Reducing the costs associated with going to parks	2.49	0.89	
Reducing the costs associated with participation	2.57	0.87	
Facility Facilitators			0.73
Increasing development of Parks	3.42	0.84	
Offering more programs in local parks	3.62	0.78	
Location Facilitators			0.82
Developing parks closer to home	3.36	0.89	
Reducing travel time to parks	3.02	0.71	
Information Facilitators			0.78
Providing more information about existing parks and programs	3.65	0.87	
Providing more activities	3.49	0.65	

Items not included: Providing more public transit, making parks safer, reducing overcrowding, reducing development of parks

Exploratory factor analysis of constraint negotiation items did not produce distinct, meaningful categories when factors were determined a priori or using exploratory factor analysis techniques. As such, the researcher opted to retain individual items for analysis. Any constraint negotiation item with a mean response of 3.5 of higher agreement on the Likert-type measure was selected for continued analysis. As indicated in Table 20 on page, 52, the following items were entered as dependent variables for hypothesis testing: “set aside time for activity”, “try to find people with similar interests”, “push myself harder to participate”, “learn more about

locations of outdoor recreation areas", "find information about recreation activities", and "try to learn new activities".

Frequency of Participation and Demographic Characteristics

Respondents' demographic characteristics were used as individual difference variables in paired 't'-test, ANOVA, and correlation analyses to understand how personal characteristics are related to respondents' reported participation frequency, perceived constraints, agency facilitation strategies, and constraint negotiation strategies. Specifically, researchers examined how the role of age, race/ethnicity, education, income and gender predicted participation frequency, perceived constraints, agency facilitation strategies, and constraint negotiation strategies. Participation frequency was measured by asking participants to identify their frequency of participation in outdoor activities at Greenville facilities and also other outdoor places. Their options for both items consisted of the following: (a) don't participate, (b) participate once or twice a year, (c) participate less than once a month, (d) participate about once a month, (e) participate about once a week, and (f) participate almost every day.

A paired-samples 't'-test was conducted with visiting local parks and outdoor activity facilities in Greenville entered as the independent variable and gender entered as the dependent variable. There was a significant difference in scores between male (M=3.86, SD=1.63) and female (M=4.48, SD=1.53) visitations to local parks and outdoor activity facilities; $t(116)$ =-18.17, $p < .001$. Another paired-samples 't'-test was conducted with participation in outdoor activities in other places in Greenville serving as the independent variable and gender serving as the dependent variable. There was a significant difference in scores between male (M=3.29, SD=1.89) and female (M=3.64, SD=1.79) participation in outdoor activities in other places; $t(116)$ = -11.20, $p < .001$.

Three separate ANOVA tests were conducted with participation frequency as the independent variable and race/ethnicity, education level, and income as the dependent variables, respectively. There was not a significant relationship of race/ethnicity to frequency of visiting local parks and facilities in Greenville at the $p<.05$ level for all conditions [$F(5, 112) = 1.631$, $p = .157$]. There was also not a significant relationship of race/ethnicity to participating in outdoor activities in other place in Greenville at the $p<.05$ level for all conditions [$F(5, 112) = .316$, $p=.902$]. There was no significant association of education to frequency of visiting local parks and facilities in Greenville at the $p<.05$ level for all conditions [$F(5, 113) = .752$, $p=.586$]. No significant relationship was observed between respondents' level of educational attainment and their participation in outdoor activities in other places in Greenville at the $\alpha<.05$ level for all conditions [$F(5, 113) = 1.587$, $p=.169$]. There was no significant association of income to frequency of visiting local parks and facilities in Greenville at the $\alpha<.05$ level for all conditions [$F(7, 107) = 0.336$, $p=.936$]. However, there was a statistically significant relationship of income according to respondents when researchers examined participation in outdoor activities in other place in Greenville [$F(7, 107) = 2.335$, $p=.029$].

Table 7: Analysis of Variances on Frequency of Participation and Race/Ethnicity

		Sum of Squares	df	F	Sig.
How often do you visit local parks and outdoor activity facilities in Greenville?	Between Groups	20.113	5	1.631	.157
	Within Groups	276.158	112		
	Total	296.271	117		
How often do you participate in outdoor activities in other place in Greenville?	Between Groups	5.447	5	.316	.902
	Within Groups	386.044	112		
	Total	391.492	117		

Table 8: Analysis of Variances on Frequency of Participation and Education Level

		Sum of Squares	df	F	Sig.
How often do you visit local parks and outdoor activity facilities in Greenville?	Between Groups	9.545	5	.752	.586
	Within Groups	286.774	113		
	Total	296.319	118		
How often do you participate in outdoor activities in other place in Greenville?	Between Groups	25.699	5	1.587	.169
	Within Groups	366.048	113		
	Total	391.748	118		

Table 9: Analysis of Variances on Frequency of Participation and Income

		Sum of Squares	df	F	Sig.
How often do you visit local parks and outdoor activity facilities in Greenville?	Between Groups	6.331	7	.336	.936
	Within Groups	287.790	107		
	Total	294.122	114		
How often do you participate in outdoor activities in other place in Greenville?	Between Groups	51.232	7	2.335	.029*
	Within Groups	335.342	107		
	Total	386.574	114		

Note: * indicates significant differences between groups at the .05 level

A Pearson's *r* correlation coefficient was computed to assess the relationship between the age of respondents and the frequency of visiting local parks and outdoor activity facilities. Researchers observed a significant negative correlation between the two variables [$r = -0.292$, $n = 115$, $p = .002$]. Overall, there was a negative correlation between age and frequency of visiting local parks and outdoor facilities. Increases in age were correlated with a decrease in reported visitation. Another Pearson's *r* correlation coefficient was computed to examine the relationship between the age of respondents and the frequency of participating in outdoor activities in other place in Greenville. There was a negative correlation between the two variables [$r = -0.202$, $n = 115$, $p = .031$]. Overall, there was a strong, negative correlation between age and frequency of participation at other outdoor activity locations. Thus, increases in age were correlated with decreases in participation overall. In converse, this indicates that younger respondents had higher levels of participation in outdoor activities.

Table 10: Correlations between age and frequency of participation

Variables Tested	N	Sig.	r
Frequency of visiting local parks and outdoor activity facilities in Greenville	115	0.002	-0.292**
Frequency of participating in outdoor activities in other place in Greenville	115	0.031	-0.202*

Note: *Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)

Constraints and Frequency of Participation

A Pearson's *r* correlation coefficient was computed to assess the relationship between the frequency of visiting local parks and outdoor activity facilities and the *lack of time, confidence, lack of resources, lack of interest, and park location constraints*. There was a negative correlation between frequency of visiting and *confidence* [r = -0.265, n =117, p = .004]. Overall, there was a strong, negative correlation between frequency of visiting local parks and outdoor activity facilities and the *confidence* constraint factor. Increases in frequency of visiting were correlated with decreases in the *confidence* constraint factor. There was an adverse correlation between frequency of visiting and *lack of interest* constraint factor [r = -0.219, n =117, p = .018]. Increases in frequency of visiting local parks and outdoor activity facilities were correlated with decreases in the *lack of interest* constraint factor. The remaining three constraint factors showed no correlation (Table 11).

A second Pearson's *r* correlation coefficient was computed to assess the relationship between participation in outdoor activities in other places in Greenville and the *lack of time, confidence, lack of resources, lack of interest, and park location constraints*. There was a negative correlation between participation in other place and the *confidence* constraint factor [r =

-0.359, n =117, p <.001]. Overall, there was a strong, negative correlation between frequency of participation in outdoor activities at other places and the *confidence* constraint factor. Increases in frequency of participation in other areas were correlated with decreases in the confidence constraint factor. The remaining constraint factors had no significant association on the frequency of participation in outdoor activities in other places in Greenville (Table 12).

Table 11: Correlations between frequency of visiting local parks and constraints

Variables Tested	N	Sig.	r
Lack of time	117	0.241	-0.109
Confidence	117	0.004	-0.265**
Lack of resources	117	0.582	0.051
Lack of interest	117	0.018	-0.219*
Park Location	117	0.811	0.022

Note: * Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)

Table 12: Correlations between frequency of participation in other places and constraints

Variables Tested	N	Sig.	r
Lack of time	117	0.263	-0.104
Confidence	117	0.000	-0.359**
Lack of resources	117	0.342	0.089
Lack of interest	117	0.385	-0.081
Park Location	117	0.833	0.020

Note: **Correlation is significant at the .01 level (2-tailed)

Constraints and Demographic Characteristics

Respondents' demographic characteristics were used as individual differences variables in paired 't'-test, ANOVA, and correlation analyses to understand how personal characteristics are related to their reported *constraints*. Specifically, the researcher examined the role of age, race/ethnicity, education, income and gender predicted constraints. Constraints were measured by asking participants what is limiting their participation in outdoor activities. Their options for

the 21 different constraint items consisted of: (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, and (e) strongly agree. After exploratory factor analysis five distinct categories of constraints appeared in the data (i.e. Lack of time, Confidence, Lack of resources, Lack of interest, and Park location).

A paired-samples 't'-test was conducted with the lack of time serving as the independent variable and gender serving as the dependent variable. There was a significant difference in scores between male (M=3.19, SD=1.27) and female (M=3.16, SD=1.20) for *lack of time*; $t(118) = 15.56$, $p<0.001$. A paired-samples 't'-test was conducted with *confidence* serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=1.72, SD=0.92) and females (M=1.85, SD=0.92) for *confidence*; $t(118) = 15.80$, $p<.001$. A paired-samples 't'-test was conducted with *lack of resources* serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.09, SD=1.26) and females (M=2.57, SD=1.19) for *lack of resources*; $t(118) = 16.43$, $p<0.001$. A paired-samples 't'-test was conducted with *lack of interest* serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=2.84, SD=1.22) and females (M=2.71, SD=1.10) for *lack of interest*; $t(118) = 14.74$, $p<.001$. A paired-samples 't'-test was conducted with *park location* serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=1.67, SD=0.88) and females (M=1.83, SD=0.92) for *park location*; $t(118) = 16.88$, $p<0.001$.

Three separate ANOVA tests were conducted with constraint categories serving as the independent variable and race/ethnicity, education level, and income as the dependent variable separately. There was not a significant relationship of income to lack of time at the $p<.05$ level

for all conditions [*F(7, 108)* =1.02, *p*=0.422]. There was not a significant association of income to confidence at the *p*<.05 level for all conditions [*F(7, 108)* =1.06, *p*=.394]. There was a significant relationship of income to lack of resources at the *p*<.05 level for all conditions [*F(7, 108)* =3.02, *p*=.006]. There was not a significant association of income to lack of interest at the *p*<.05 level for all conditions [*F(7, 108)* =0.77, *p*=.614]. There was not a significant relationship of income to park location at the *p*<.05 level for all conditions [*F(7, 108)* =1.40, *p*=.214]. There was not a significant relationship of race/ethnicity to lack of time at the *p*<.05 level for all conditions [*F(5, 114)* =1.46, *p*=.208]. There was not a significant association of race/ethnicity to confidence at the *p*<.05 level for all conditions [*F(5, 114)* =1.26, *p*=.286]. There was not a significant relationship of race/ethnicity to lack of resources at the *p*<.05 level for all conditions [*F(5, 114)* =2.08, *p*=.073. There was not a significant association of race/ethnicity to lack of interest at the *p*<.05 level for all conditions [*F(5, 114)* =0.03, *p*=.999]. There was a significant relationship of race/ethnicity to park location at the *p*<.05 level for all conditions [*F(5, 114)* =3.04, *p*=.013]. There was not a significant effect of education on lack of time at the *p*<.05 level for all conditions [*F(5, 113)* =1.96, *p*=.090]. There was not a significant effect of education on confidence at the *p*<.05 level for all conditions [*F(5, 113)* =1.23, *p*=.300]. There was not a significant effect of education on lack of resources at the *p*<.05 level for all conditions [*F(5, 113)* =1.30, *p*=.271]. There was a significant effect of education on lack of interest at the *p*<.05 level for all conditions [*F(5, 113)* =2.56, *p*=.031]. There was not a significant effect of education on park location at the *p*<.05 level for all conditions [*F(5, 113)* =0.65, *p*=.652].

Table 13: Analysis of Variances on Constraints and Income

		Sum of Squares	df	F	Sig.
Lack of time	Between Groups	7.117	7	1.019	0.422
	Within Groups	107.794	108		
	Total	114.912	115		
Confidence	Between Groups	7.593	7	1.060	0.394
	Within Groups	110.540	108		
	Total	118.134	115		
Lack of resources	Between Groups	19.624	7	3.021	0.006*
	Within Groups	100.223	108		
	Total	119.847	115		
Lack of interest	Between Groups	5.533	7	0.770	0.614
	Within Groups	110.893	108		
	Total	116.426	115		
Park location	Between Groups	8.785	7	1.397	0.214
	Within Groups	97.004	108		
	Total	105.789	115		

Note: * indicates significant differences between groups at the .05 level

Table 14: Analysis of Variances on Constraints and Race/Ethnicity

		Sum of Squares	df	F	Sig.
Lack of time	Between Groups	7.232	5	1.461	0.208
	Within Groups	112.839	114		
	Total	120.071	119		
Confidence	Between Groups	6.377	5	1.261	0.286
	Within Groups	115.261	114		
	Total	121.638	119		
Lack of resources	Between Groups	10.136	5	2.078	0.073
	Within Groups	111.218	114		
	Total	121.353	119		
Lack of interest	Between Groups	0.176	5	0.033	0.999
	Within Groups	121.273	114		
	Total	121.449	119		
Park location	Between Groups	14.319	5	3.038	0.013*
	Within Groups	107.476	114		
	Total	121.794	119		

Note: * indicates significant differences between groups at the .05 level

Table 15: Analysis of Variances on Constraints and Education Level

		Sum of Squares	df	F	Sig.
Lack of time	Between Groups	9.390	5	1.958	0.09
	Within Groups	108.403	113		
	Total	117.793	118		
Confidence	Between Groups	6.250	5	1.229	0.300
	Within Groups	114.928	113		
	Total	121.178	118		
Lack of resources	Between Groups	6.527	5	1.296	0.271
	Within Groups	113.838	113		
	Total	120.365	118		
Lack of interest	Between Groups	12.139	5	2.555	0.031*
	Within Groups	107.365	113		
	Total	119.504	118		
Park location	Between Groups	3.468	5	0.664	0.652
	Within Groups	118.099	113		
	Total	121.567	118		

Note: * indicates significant differences between groups at the .05 level

A Pearson's *r* correlation coefficient was computed to assess the relationship between the age of respondents and the lack of time, confidence, lack of resources, lack of interest, and park location constraints. There was no significant correlation between age and lack of time [$r = -0.174$, $n = 115$, $p = .065$]. There was a positive significant correlation between age and

confidence [$r = 0.331$, $n = 115$, $p < .001$]. Overall, there was a strong, positive correlation between age and confidence. Decreases in age were correlated with increases in confidence. There was a negative correlation between age and lack of resources [$r = -0.265$, $n = 115$, $p = .004$]. Overall, there was a strong, negative correlation between age and lack of resources. Increases in age were correlated with decreases in resources needed. There was a no significant correlation between the age and lack of interest [$r = 0.039$, $n = 115$, $p = .680$]. There was no significant correlation between the age and park location [$r = 0.045$, $n = 115$, $p = .631$].

Table 16: Correlations between age and constraints

Variables Tested	N	Sig.	r
Lack of time	115	0.065	-0.173
Confidence	115	0.000	0.331**
Lack of resources	115	0.004	-0.265**
Lack of interest	115	0.680	0.039
Park Location	115	0.631	0.045

**Correlation is significant at the .01 level (2-tailed)

Agency Facilitation Strategies and Demographic Characteristics

Respondents' demographic characteristics were used as individual differences variables in paired 't'-test, ANOVA, and correlation analyses to understand how personal characteristics are related to their reported *agency* facilitation strategies. Specifically the researcher examined the role of age, race/ethnicity, education, income and gender predicted facilitation strategies. Agency facilitation strategies were measured by asking participants what strategies a business or provider can make that may help increase their frequency of participation. Their options for the 12 different strategies consisted of: (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, and

(e) strongly agree. After exploratory factor analysis four distinct categories of facilitation strategies appeared in the data (i.e. cost, facility, location, information).

A paired-samples 't'-test was conducted with the *cost facilitators* serving as the independent variable and gender serving as the dependent variable. There was a significant difference in scores between male (M=2.51, SD=1.25) and female (M=2.57, SD=1.18) for *cost facilitators*; $t(119)$ =14.87, p<.001. A paired-samples 't'-test was conducted with *facility facilitators* as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.25, SD=1.31) and females (M=3.69, SD=1.06) for *facility facilitators*; $t(119)$ = 16.70, p<.001. A paired-samples 't'-test was conducted with *location facilitators* as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.0, SD=1.27) and females (M=3.34, SD=1.12) for *location facilitators*; $t(119)$ =15.68, p<.001. A paired-samples 't'-test was conducted with *information facilitators* as the independent variable and gender as the dependent variable. Researchers observed a significant difference in the scores between male (M=3.35, SD=1.29) and females (M=3.74, SD=1.10) for *information facilitators*; $t(119)$ =16.16.49, p<.001.

Three separate ANOVA tests were conducted with agency facilitation strategies categories serving as the independent variable and race/ethnicity, education level, and income as the dependent variable separately. There was not a significant effect of income to cost facilitators at the p<.05 level for all conditions [$F(7, 109)$ =1.627, p=.135]. There was not a significant effect of income to facility facilitators at the p<.05 level for all conditions [$F(7, 109)$ =0.983, p=.447]. There was not a significant effect of income to location facilitators at the p<.05 level for all conditions [$F(7, 109)$ =1.258, p=.278]. There was not a significant effect of income

to information facilitators at the $p<.05$ level for all conditions [$F(7, 109) = 1.28$, $p=.267$]. There was not a significant effect of race/ethnicity to cost facilitators at the $p<.05$ level for all conditions [$F(4, 116) = 1.395$, $p=.240$]. There was not a significant effect of race/ethnicity to facility facilitators at the $p<.05$ level for all conditions [$F(4, 116) = 0.154$, $p=.961$]. There was not a significant effect of race/ethnicity to location facilitators at the $p<.05$ level for all conditions [$F(4, 116) = 1.274$, $p=.284$]. There was not a significant effect of race/ethnicity to information facilitators at the $p<.05$ level for all conditions [$F(4, 116) = 0.501$, $p=.735$]. There was not a significant effect of education to cost facilitators at the $p<.05$ level for all conditions [$F(5, 115) = 0.578$, $p=.717$]. There was not a significant effect of education to facility facilitators at the $p<.05$ level for all conditions [$F(5, 115) = 0.498$, $p=.777$]. There was not a significant effect of education to location facilitators at the $p<.05$ level for all conditions [$F(5, 115) = 0.320$, $p=.900$]. There was not a significant effect of education to information facilitators at the $p<.05$ level for all conditions [$F(5, 115) = 0.443$, $p=.817$].

Table 17: Analysis of Variances on Agency Facilitation Strategies and Income

		Sum of Squares	df	F	Sig.
Cost Facilitators	Between Groups	11.086	7	1.627	0.135
	Within Groups	106.126	109		
	Total	117.213	116		
Facility Facilitators	Between Groups	6.791	7	0.983	0.447
	Within Groups	107.535	109		
	Total	114.326	116		
Location Facilitators	Between Groups	8.916	7	1.258	0.278
	Within Groups	110.355	109		
	Total	119.271	116		
Information Facilitators	Between Groups	8.007	7	1.280	0.267
	Within Groups	97.400	109		
	Total	105.407	116		

Table 18: Analysis of Variances on Agency Facilitation Strategies and Race/Ethnicity

		Sum of Squares	df	F	Sig.
Cost Facilitators	Between Groups	5.607	4	1.395	0.240
	Within Groups	116.563	116		
	Total	122.170	120		
Facility Facilitators	Between Groups	0.634	4	0.154	0.961
	Within Groups	119.405	116		
	Total	120.039	120		
Location Facilitators	Between Groups	5.212	4	1.274	0.284
	Within Groups	118.660	116		
	Total	123.871	120		
Information Facilitators	Between Groups	2.052	4	0.501	0.735
	Within Groups	118.746	116		
	Total	120.798	120		

Table 19: Analysis of Variances on Agency Facilitation Strategies and Education Level

		Sum of Squares	df	F	Sig.
Cost Facilitators	Between Groups	2.998	5	0.578	0.717
	Within Groups	119.362	115		
	Total	122.360	120		
Facility Facilitators	Between Groups	2.535	5	0.498	0.777
	Within Groups	117.060	115		
	Total	119.595	120		
Location Facilitators	Between Groups	1.697	5	0.320	0.900
	Within Groups	122.112	115		
	Total	123.809	120		
Information Facilitators	Between Groups	2.302	5	0.443	0.817
	Within Groups	119.408	115		
	Total	121.709	120		

A Pearson's *r* correlation coefficient was computed to understand the relationship between the age of respondents and the cost facilitators, facility facilitators, location facilitators, and information facilitators. For this data there was no significant correlation between age and cost facilitators [$r = -0.93$, $n = 118$, $p = .317$]. There was a negative correlation between age and facility facilitators [$r = -0.188$, $n = 118$, $p = .042$]. Overall, there was a strong, negative correlation between age and facility facilitators. Increases in age were correlated with decreases in facility facilitators. There was no significant correlation between the age and location facilitators [$r = -0.103$, $n = 118$, $p = .269$]. There was a negative correlation between age and

information facilitators [r = -0.381, n =118, p< 0.001]. Overall, there was a strong, negative correlation between age and information facilitators. Increases in age were correlated with decrease in information facilitators. Alternatively, younger respondents felt the facilitators for *facility* and *information* were less important.

Table 20: Correlations between age and agency facilitation strategies

Variables Tested	N	Sig.	r
Cost Facilitators	118	0.317	-0.093
Facility Facilitators	118	0.042	-0.188*
Location Facilitators	118	0.269	-0.103
Information Facilitators	118	0.000	-0.381**

Note: *Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)

Negotiation and Demographic Characteristics

Respondents' demographic characteristics were used as individual differences variables in paired 't'-test, ANOVA, and correlation analyses to understand how personal characteristics are related to their reported negotiations. Specifically, the researcher examined the role of age, race/ethnicity, education, income and gender predicted negotiations strategies. Negotiations were measured by asking participants what things they could do to increase their outdoor activity participation. Their options for the 15 different negotiation items consisted of: (a) strongly disagree, (b) disagree, (c) neutral, (d) agree, and (e) strongly agree. After selecting the negotiation items with a mean of 3.5 or higher only six items remained (i.e. set aside time for activity, try to find people with similar interests, push myself harder to participate, learn more about locations of outdoor recreation areas, find information about recreation activities, and try to learn new activities).

A paired-samples 't'-test was conducted with the set aside time for activity serving as the independent variable and gender as the dependent variable. There was a significant difference in scores between male (M=3.84, SD=1.14) and female (M=3.84, SD=0.90) for set aside time for activity; $t(120)$ =-22.314, p<.001. A paired-samples 't'-test was conducted with try to find people with similar interests serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.37, SD=1.17) and females (M=3.74, SD=0.94) for trying to find people with similar interests; $t(120)$ =-20.38, p<.001. A paired-sample t-test was conducted with push myself harder to participate as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.57, SD=1.10) and females (M=3.70, SD=1.05) for pushing themselves harder to participate; $t(120)$ =-19.715, p<.001. A paired-samples 't'-test was conducted with learn more about locations of outdoor recreation areas serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=2.98, SD=1.27) and females (M=3.94, SD=0.88) for learn more about locations of outdoor recreation areas; $t(120)$ =-20.329, p<.001. A paired-samples 't'-test was conducted with find information about recreation activities serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.43, SD=1.17) and females (M=3.86, SD=1.01) for find information about recreation activities; $t(120)$ =-20.736, p<.001. A paired-samples 't'-test was conducted with try to learn new activities serving as the independent variable and gender as the dependent variable. There was a significant difference in the scores between male (M=3.35, SD=1.20) and females (M=3.73, SD=1.07) for try to learn new activities; $t(120)$ =-18.758, p<.001.

Three separate ANOVA tests were conducted with negotiation items serving as the independent variable and race/ethnicity, education level, and income as the dependent variable separately. There was no a significant relation income to any of the six negotiation strategies. There was a significant association of race/ethnicity to learn more about locations of outdoor recreation areas at the $p<.05$ level for all conditions [$F(5, 116) = 3.21$, $p=.009$]. There was a slightly significant relationship of race/ethnicity to find information about recreation activities at the $p<.05$ level for all conditions [$F(5, 116) = 1.99$, $p=.086$]. There was not a significant association of race/ethnicity on the remaining negotiation strategies at the $p<.05$ level for all conditions. There was a significant relationship of education to set aside time for activity at the $p<.05$ level for all conditions [$F(5, 117) = 3.53$, $p=.005$]. There was a significant association of education to try to learn new activities at the $p<.05$ level for all conditions [$F(5, 116) = 3.46$, $p=.006$]. There was a slightly significant association of education to try to find people with similar interests at the $p<.05$ level for all conditions [$F(5, 117) = 1.95$, $p=.091$]. There was a slightly significant association of education to push myself harder to participate at the $p<.05$ level for all conditions [$F(5, 117) = 2.11$, $p=.070$].

Table 21: Analysis of Variances on Negotiation Strategies and Income

		Sum of Squares	df	F	Sig.
Set aside time for activity	Between Groups	5.271	7	0.790	0.0597
	Within Groups	105.838	111		
	Total	111.109	118		
Try to find people with similar interests	Between Groups	6.744	7	0.895	0.513
	Within Groups	119.474	111		
	Total	126.218	118		
Push myself harder to participate	Between Groups	11.941	7	1.601	0.142
	Within Groups	118.277	111		
	Total	130.218	118		
Learn more about locations of outdoor recreation areas	Between Groups	7.564	7	0.823	0.570
	Within Groups	145.714	111		
	Total	153.277	118		
Find information about recreation activities	Between Groups	8.124	7	1.018	0.423
	Within Groups	126.582	111		
	Total	134.706	118		
Try to learn new activities	Between Groups	4.565	7	0.505	0.829
	Within Groups	142.087	110		
	Total	146.653	117		

Table 22: Analysis of Variances on Negotiation Strategies and Race/Ethnicity

		Sum of Squares	df	F	Sig.
Set aside time for activity	Between Groups	3.361	5	0.668	0.648
	Within Groups	116.680	116		
	Total	120.041	121		
Try to find people with similar interests	Between Groups	4.726	5	0.851	0.516
	Within Groups	128.782	116		
	Total	133.508	121		
Push myself harder to participate	Between Groups	6.529	5	1.153	0.336
	Within Groups	131.316	116		
	Total	137.844	121		
Learn more about locations of outdoor recreation areas	Between Groups	19.751	5	3.213	0.009*
	Within Groups	142.617	116		
	Total	162.369	121		
Find information about recreation activities	Between Groups	11.417	5	1.985	0.086
	Within Groups	133.468	116		
	Total	144.885	121		
Try to learn new activities	Between Groups	6.544	5	1.022	0.408
	Within Groups	147.241	115		
	Total	153.785	120		

Note: * indicates significant differences between groups at the .05 level

Table 23: Analysis of Variances on Negotiation Strategies and Education Level

		Sum of Squares	df	F	Sig.
Set aside time for activity	Between Groups	15.811	5	3.526	0.005*
	Within Groups	104.937	117		
	Total	120.748	122		
Try to find people with similar interests	Between Groups	10.301	5	1.954	0.091
	Within Groups	123.374	117		
	Total	133.675	122		
Push myself harder to participate	Between Groups	11.600	5	2.105	0.070
	Within Groups	128.937	117		
	Total	140.537	122		
Learn more about locations of outdoor recreation areas	Between Groups	11.828	5	1.836	0.111
	Within Groups	150.758	117		
	Total	162.585	122		
Find information about recreation activities	Between Groups	4.002	5	0.664	0.651
	Within Groups	140.989	117		
	Total	144.992	122		
Try to learn new activities	Between Groups	19.991	5	3.462	0.006*
	Within Groups	133.984	116		
	Total	153.975	121		

Note: * indicates significant differences between groups at the .05 level

A Pearson's r correlation coefficient was computed to assess the relationship between the age of respondents and the six negotiation strategies (i.e. set aside time for activity, try to find people with similar interests, push myself harder to participate, learn more about locations of outdoor recreation areas, find information about recreation activities, and try to learn new activities). There was a negative significant correlation between age and set aside time for activity [r = -0.305, n =119, p =.001]. Overall, there was a strong, negative correlation between age and set aside time for activity. Increases in age were correlated with decreases in the set aside time for activity negotiation strategy. There was an adverse correlation between age and the try to find people with similar interests strategy [r = -0.181, n =119, p =.049]. Overall, there was a strong, negative correlation between age and the finding people with similar interests negotiation strategy. Increases in age were correlated with decreases in trying to find people with similar interests. There was a no significant correlation between the age and the push myself harder to participate strategy [r =-0.137, n =119, p =.137]. There was a negative correlation between age and the learn more about locations of outdoor recreation areas strategy [r = -0.253, n =119, p =.005]. Overall, there was a strong, negative correlation between age and the learn more about locations of outdoor recreation areas negotiation strategy. Increases in age were correlated with decreases in learn more about locations of outdoor recreation areas. There was an adverse correlation between age and the find information about recreation activities negotiation strategy [r = -0.293, n =119, p = .001]. Increases in age were correlated with decreases in finding more information about activities. There was a negative correlation between age and the try to learn new activities negotiation strategy [r = -0.335, n =119, p <.001]. Increases in age were correlated with decreases in trying to learn new activities.

Table 24: Correlations between age and negotiation strategies

Variables Tested	N	Sig.	r
Set aside time for activity	115	0.001	-0.305**
Try to find people with similar interests	119	0.049	-0.181*
Push myself harder to participate	119	0.137	-0.137
Learn more about locations of outdoor recreation areas	119	0.005	-0.253**
Find information about recreation activities	119	0.001	-0.293**
Try to learn new activities	119	0.000	-0.335**

Note: *Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)

Discussion

Summary of Key Findings

The purpose of this study was to determine if there was a relationship between leisure constraints and different socio-demographic groups in Greenville, North Carolina. The study also explored how the constraints to outdoor activities were associated with actual participation of individuals' in outdoor activities. Additionally, this study explored which constraint negotiation strategies and agency facilitation strategies have the potential to increase participation frequency in outdoor recreation activities in Greenville, NC. A final aim of this study was to describe the constraint negotiation strategies and agency facilitation strategies that may best encourage outdoor recreation participation according to respondents' socio-demographic characteristics.

The findings from this study yielded both predictable and perplexing results. The discussion section will first review the findings of frequency of participation when it came to socio-demographic groups. Even though this was not a sole purpose of the study, this information helps explain some of the other findings. When asked how often they visit local parks and outdoor activity facilities in Greenville, NC roughly 50.9% of all the respondents reported visiting once a week or more. When asked about participation in outdoor activities at other places, roughly 36.1% of all participants reported visiting once a week or more. These numbers suggest that individuals participating in the study had a high level of participation of outdoor activities, considering that approximately 48.4% of the U.S. population participated in at least one outdoor activity in the last year (The Outdoor Foundation, 2016). Results from analyses showed a statistically significant relationship between age, income, and gender with frequency of participation at both Greenville parks and outdoor facilities and other outdoor

places. More specifically it was discovered that females participated more than males at both local parks and other places. This is interesting because according to results from the *Outdoor Recreation Participation Topline Report* (The Outdoor Foundation, 2016), females (49%) reported participating in outdoor activities slightly less often than males (51%). Other findings showed an increase in age was correlated with a decrease in frequency of participation at both local parks and outdoor facilities and other outdoor activity locations. This finding is consistent with those represented in the Physical Activity Council's (2016) findings that older individuals are less active than younger individuals.

The first hypothesis investigated how constraints to outdoor recreation activities were associated with their reported participation of individuals in outdoor recreation activities. When the researcher analyzed the five constraint factors (e.g. *lack of time, confidence, lack of resources, lack of interest, and park locations)* with frequency of participation, the findings were intriguing. It was discovered that the *confidence* factor had an inverse relationship with frequency of participation at local parks and outdoor facilities. The constraint factor of *confidence* included the constraint items: "I don't have a partner", "I don't do things outdoors", "I don't have the skills needed", and "I lack the self-confidence to participate." In other words, a higher frequency of participation at local parks and outdoor activity facilities showed a decrease in this constraint factor. This same inverse relationship was discovered with the *confidence* constraint factor and the frequency of participation in other outdoor areas. This indicates that participation in these spaces may allow for the development of self-efficacy or a belief in one's abilities to successfully participate. The only other factor that showed that an increase in participation at local parks and outdoor facilities and a decrease in the factor was the *lack of interest* factors. The constraint items factored into the *lack of interest* factor were "I like to do

other things for recreation," "my friends prefer to do other things," and "I'm too busy with other recreation activities." The other three factors showed no association with the frequency of participation at the parks and facilities in Greenville. These findings are intriguing since one of the highest rated constraints in the literature is a lack of time and this factor did not reveal a relationship with frequency of participation. It is also of interest that only two constraint factors were significant in this study, especially since Young, Ross, and Barcelona's (2003) research found that the constraints were reflected to be more substantial among non-frequent participants than frequent participants.

The researcher next investigated the connection of constraints' to socio-demographic characteristics. More specifically, the researcher analyzed whether constraints to outdoor recreation participation demonstrated group differences according to individuals' socio-demographic characteristics. It was believed from other research that individuals with certain socio-demographics would report having higher constraints (e.g. women, non-white, not college educated, older adults, and lower income) (Shores, Scott, & Floyd, 2007; Mowen, Payne, & Scott, 2005; Philipp, 1995). After multiple analyses, it was evident that for this data that males were more constrained in three out of the five constraint factors; males were more constrained in the *lack of time, lack of resources,* and *lack of interest* constraint factors. The *lack of time* factors included three constraint items ("I'm too busy with other activities," "I don't have enough time," and "I'm too busy with work, school, or family"). The *lack of resources* items were "I lack information about activities," "I don't know where to get park information," and "I don't have enough money." The *lack of interest* factor items were listed in the above paragraph. This is interesting in light of previous research by Mowen, Payne, and Scott (2005) that reported females were more likely than males to report the constraints of being busy with family

responsibilities and costing too much. In this research, females, on the other hand, showed higher constraints in the *confidence* and *park location* constraint factors. The items included in the *confidence* factor are described above and the *park location* factors were "my local parks are too far away" and "I have no way to get to the park." Since the constraint item "I'm afraid of crime" was removed from factor analysis, it is unclear if these results reflected previous research that expresses female respondents were more likely to state fear of crime as a main constraint to outdoor activity participation (Mowen, Payne, & Scott, 2005; Shores, Scott, & Floyd, 2007). In this study, it seems males reported higher constraints on the items in the factors than females, which is different than most research that states females are more constrained (Child et al. 2015; Mowen, Payne, and Scott, 2005; Shores, Scott, & Floyd, 2007).

When tests were run to analyze the relationship between income, race/ethnicity, education and age to the constraint factors, it was discovered that a few relationships were significant. Given the extant literature described earlier, it was expected that socio-demographic differences would play a major factor in the level of perceived constraints (Shinew, Floyd, & Parry, 2004; Philipp, 1995; Shores, Scott, & Floyd, 2007; Mowen, Payne, & Scott, 2005; Child et al., 2015; Spivey & Hritz, 2013). When examining the association of income to the factors, the only constraint factor that was of significance was *lack of resources*. This is similar to other literature where lower income individuals are usually more constrained when compared to higher income when it comes to parks being too expensive (Mowen, Payne, & Scott, 2005; Shores, Scott, & Floyd, 2007). However, researchers are unable to draw a conclusion on which income level is more constrained in this factor analysis. The investigation into the relationship between race/ethnicity to the *park location* factor was the only one with significance. Park location was found in past research to be a higher constraint among minorities in previous research when

compared to whites (Philipp, 1995; Shores, Scott, and Floyd, 2007; and Mowen, Payne, and Scott, 2005). However, this study cannot conclude which race/ethnicity is the most constrained. The education variable only showed a relationship with the *lack of interest* factor. The older individuals reported lower scores for *lack of resources* while the younger participants indicated a correlation with higher *confidence* factor items. The lower constraints for the lack of resource factor in older individuals mirrors that of Child et al.'s (2015) study that indicated older adults had more knowledge about recreation activities than other study participants.

When exploring the agency facilitation strategy factors of *cost facilitators, facility facilitators, location facilitators, and information facilitators* a few findings are important to discuss. Gender related to all the agency facilitation strategy factors, with females having higher scores than males on all factors. It is noteworthy that females participated more frequently and were less constrained among the factors, but this study results also showed that with the facilitation strategy factors implemented they would increase their participation in outdoor activities. Younger individuals also reported that they felt the agency facilitation strategy factors of *facility* and *information* were less important to them compared to older individuals. The *facility* factor includes "increasing development of parks" and "offering more programs in local parks." Both these facilitation strategy items are examples of leisure affordances, which occur when agencies change the environment of the location to invoke changes in behavior (Scott & Mowen, 2010; Kleiber, Walker, & Mannell, 2011). The *information* factor is even more interesting when looking back at the constraint factor of *lack of resources* where older adults reported lower constraints. It can be concluded that younger individuals are being constrained by the lack of information being provided and would like to know more about what is going on around Greenville.

The analyses of negotiation strategies and socio-demographic findings revealed a few key findings that might direct efforts for future research. When looking at gender and the six negotiation strategies of "set aside time for activity," "try to find people with similar interests," "push myself harder to participate," "learn more about locations of outdoor recreation areas," "find information about recreation activities," and "try to learn new activities," it was discovered that females showed higher responses to all six negotiations. Again it is interesting that females reported lower constraint factors and higher frequency of participation but higher negotiations and facilitation strategies. Race/ethnicity revealed a significant association to "learn more about locations of outdoor recreation areas." It is noteworthy that race/ethnicity had a relationship to the constraint factor of *park location*. The analyses also exposed a relationship between education level to both "set aside time" and "try to learn new activities." The older participants showed significantly lower scores on all negotiation items except push myself harder to participate.

Study Limitations

The study was first designed as a mail only survey but due to various factors the data were not able to be collected as successfully as the researcher hoped. It was the original hope of this study to collect data from both frequent and non-frequent users by using these mail surveys. Due to the lost data, the research study needed to be adjusted to collect data in a more timely manner than the 60-day timeline necessary for mail surveys. The revised research method had a higher focus on park users compared to non-frequent park users, since the majority of surveys were collected at local facilities—although door-to-door intercepts also were used.

The higher level of frequent users might have caused this study to have a high avidity bias causing another limitation to the current study. The majority of individuals in this study

were already participating at outdoor facilities and showed higher levels of involvement which suggests higher levels of initial enthusiasm toward outdoor activities. This higher level of enthusiasm seems to have resulted in participants who were more eager to fill out the study survey when compared to the door-to-door intercepts. In other words, individuals at local facilities were more willing to fill out the surveys compared to those collected outside local facilities.

This limitation could be explained because of the concept of displacement. Displacement is a change in a participant's behavior that is caused by environmental or contextual changes of the surrounding, that usually decreased visitation or involvement (Anderson, & Brown, 1984; Manning, & Valliere, 2001). It could be concluded that individuals at local facilities were satisfied with the environment and continued to participate; whereas individuals not at the facilities could have been displaced because of some factors involved in the location.

Implications for Future Research

An examination of study findings and the limitations of the current approach offer avenues for future research. If this study were implemented again, the mail surveys would be a great asset to get a larger variety of participant responses and differences. It would also provide an increased sample size.

The participants in this study had a relatively high rate of participation in outdoor activities at both local parks and outdoor facilities and other outdoor places. Respondents also indicated a relatively low level of constraints on most of the constraint items. If a future study were able to collect more surveys from individuals in Greenville who had a lower level of participation, it could show a better representation of the constraints felt by the whole population of Greenville. According to Jackson et al. (1993) constraints are obstacles that usually result in

modified participation rather than nonparticipation; so it makes sense that the majority of participants in this study (who were at parks) didn't likely *perceive* themselves as constrained. This is borne out by the observation that even though the participants in this study showed a high level of participation and low level of constraints, they still reported high agency facilitation and negotiation strategies.

A future study should follow the original study design with hopes to recruit a larger diversity of frequent and non-frequent users of outdoor facilities. It also would be a good addition to include an optional qualitative study design to understand individuals' constraints more fully. This mixed-method approach could allow the researcher to get more in-depth or rich data from the participants on their constraints, agency facilitation strategies, and negotiations. The researcher could interview volunteers from the quantitative mail surveys to help understand the level of constraints, what might be the cause of perceived constraints, and how participants negotiate these constraints. This qualitative aspect would also give the researcher a chance to discover the reality of how constraints are experienced by individuals (e.g., if a spouse is constrained for medical issues does that mean the other spouse studied is also constrained). This mixed method approach would also give the researcher a chance to better understand the participants discretionary income instead of reported income to better understand if cost of living is a factor for reported constraints. It would also provide researchers with possible agency facilitation strategies from potential users of the facilities.

Implications for practice

A few key contributions from this study could be useful for agencies or recreation departments. Because the participants had lower scores on constraint items but higher scores on agency facilitation strategies and negotiation items suggests that administrative actions can and

should be taken to help increase participation at outdoor facilities or locations. First, recreation administrators and other agencies should focus on the strategies that participants in this study identified as helpful. Based on the findings from this study items such as "offering more programs in local parks" or "providing more information about existing parks" could be implemented in Greenville parks and recreation facilities to help increase the frequency of participation among different populations. For instance, according to the findings of this study if agencies wanted to focus on the younger population of Greenville. They could focus on providing more information about parks and activities, along with offering more programs for younger individuals in local parks.

Second, agencies or recreation departments should realize that participants—particularly those well versed in constraint negotiation—often might not recognize their own constraints. As shown in the findings, participants in this study had a high level of frequency of participation and displayed low intensities of constraints, however they still found agency facilitation and negotiation strategies helpful for increasing their participation. The findings illustrated that even though the participants in this study participated frequently, they were still using some strategies to overcome things that limited their participation and could benefit from additional ones. As stated "no constraint or type of constraint is experienced with equal intensity by everyone" and "no subgroup of population, and probably no individual, is entirely free from constraints" (Jackson, 2005, p. 7).

The third implication to practice is, it's already working—people in this community are successfully overcoming their constraints to use the parks. Greenville provides facilities that attract individuals to participate. One such facility that had a lot of participants (perhaps due to its novelty), when collecting surveys, was the new playground on Town Commons. This

location had a wide variety of socio-demographic groups and seemed to be an inviting place for all participants. This re-design of an existing location is a perfect example of an agency facilitation strategy that seems to be benefiting the city of Greenville. The expansion of the greenways is another. Greenville is also starting to host various special events in local parks. These strategies seem to mirror the strategy that was introduced in Mowen et al.'s (2005) study on Cleveland Metropolitan Parks when park staff were trying to help people negotiate constraints by having special events at various parks and creating more parks in the area (e.g. agency facilitation strategy).

Conclusion

It should be noted that even though agency facilitation and negotiation strategies were reported higher than constraints, independent agencies or recreation departments in Greenville might not be able to faithfully reach all individuals who are constrained. The highest constraint scores for all participants were: "I'm too busy with work, school, or family" (*M*= 3.22, *SD*=1.27), "I'm busy with other activities" (*M*= 3.16, *SD*=1.23), and "I don't have enough time" (*M*= 3.10, *SD*=1.23), which suggests the demand on individuals' time is the primary reason respondents are not participating more. Further, the agency facilitation strategies needed to help participants negotiate these constraints and encourage increased outdoor recreation participation is not always obvious. These types of constraints are why an understanding of the hierarchical model of leisure constraints can be useful in the field (Crawford & Godbey, 1993). If recreation providers are able to understand these constraints, they have the opportunity to offer negotiation strategies that can assist with participation in Greenville local parks. The benefits of this endeavor and increased participation could make this community a healthier place to live where residents can reach their full potential.

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Appendix A

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · **www.ecu.edu/irb**

Notification of Exempt Certification

From:	Social/Behavioral IRB
To:	Andrew Frost
CC:	Kindal Shores
Date:	9/15/2016
Re:	UMCIRB 16-001376 Perceived Constraints and Negotiation Strategies

I am pleased to inform you that your research submission has been certified as exempt on 9/14/2016. This study is eligible for Exempt Certification under category #2.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

Appendix B

Dear Participant,

I am Andrew Frost, a Masters of Science student at East Carolina University in the Department of Recreation and Leisure Studies. I am asking you to take part in my research study entitled, "Perceived Constraints and Negotiation Strategies in Greenville, North Carolina's Outdoor Activities."

The purpose of this research is to determine if there is a relationship between leisure constraints and the frequency of participation in outdoor recreation among residents of Greenville, North Carolina. By doing this research, I hope to learn what constraints are affecting residents of Greenville, NC and what negotiations/affordances could be used to help increase outdoor recreation participation. Your participation is completely voluntary.

You are being invited to take part in this research because of your residency in Greenville, NC. The individual completing this survey needs to be at least 18 years of age. The amount of time it will take you to complete this survey is between 5-10 minutes.

If you agree to take part in this survey, you will be asked questions that relate to your outdoor activity participation, factors limiting your outdoor activity participation, and negotiations/affordances to help increase your outdoor activity participation.

This research is overseen by the ECU Institutional Review Board. Therefore some of the committee members or the IRB staff may need to review my research data. However, the information you provide will not be linked to you when reported. Your identity will remain confidential and only my supervisor and myself will see your responses.

If you have questions about your rights after taking part in this research, call the Office of Research Integrity & Compliance (ORIC) at 252-744-2914 (8:00 am-5:00 pm). If you have any other questions or concerns about this research study, you may reach my faculty supervisor Dr. Kindal Shores, at (252) 328-5649.

You do not have to take part in this research, and you can stop at any time. If you decide you are willing to take part in this study, continue on with the survey that is provided.

Thank you for taking the time to participate in my research.

Sincerely,
Andrew Frost
Principal Investigator

Appendix C

Perceived Constraints and Negotiation Strategies in Greenville, North Carolina's Outdoor Activities

Recreation and Leisure Studies
East Carolina University
Greenville, NC 27858

In the following questions, please tell us a little about your history in Greenville.

1. **Do you own or rent your residence in Greenville, North Carolina? (Please circle only one)**

    1. Own
    2. Rent

2. **How long have you lived in Greenville, North Carolina?**

    _____Years

3. **How often do you visit local parks and outdoor activity facilities in Greenville? (Please circle only one)**

    1. I don't visit
    2. I visit once or twice a year
    3. I visit less than once a month
    4. I visit about once a month
    5. I visit about once a week
    6. I visit more than once a week

4. **How often do you participate in outdoor activities in other places in Greenville? (Please circle only one)**

    1. I don't participate
    2. I participate once or twice a year
    3. I participate less than once a month
    4. I participate about once a month
    5. I participate about once a week
    6. I participate more than once a week

5. What outdoor activities do you most often participate in? (Please circle your top five)

1. Walking
2. Running/Jogging
3. Swimming
4. Biking
5. Fishing
6. Golf
7. Organized sports
8. Time alone
9. Children's activities
10. Boating
11. Wildlife viewing
12. Taking photgraphs
13. Picnicking
14. Trail hiking
15. Time with family
16. Tennis
17. Dog Park
18. Other:_____
19. Other:_____
20. Other:_____

6. Which of the following Greenville facilities have you visited in the past year? (Please circle all that apply)

1. Town commons
2. Westhaven Park
3. Woodlawn Park
4. Peppermint Park
5. River Park North
6. Jaycee Park
7. Paramore Park
8. River Birch Tennis Center
9. Eastside Park
10. Elm Street Park
11. Evans Park
12. Extreme Park at Jaycee Park
13. Greensprings Park
14. Guy Smith Park
15. H. Boyd Lee Park
16. Hillsdale Park
17. Andrew A. Best Freedom Park
18. Beatrice Maye Floral Garden Park
19. Bradford Creek Golf Course
20. Bradford Creek Soccer Complex
21. Disc Golf Course at "The Meadow"
22. Dream Park

In this section we are interested in understanding factors that might be limiting your participation in outdoor activities. For each of the following statements, please indicate your level of agreement by circling your response. Each statement describes possible limiting factors to your outdoor activity participation.

7. My participation in outdoor recreation is limited because…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. I'm too busy with other activities	1	2	3	4	5
b. I don't have enough time	1	2	3	4	5
c. I like to do other things for recreation	1	2	3	4	5
d. I lack information about activities	1	2	3	4	5
e. I don't know where to get park information	1	2	3	4	5
f. My friends prefer to do other things	1	2	3	4	5
g. I don't have enough money	1	2	3	4	5
h. My family lacks interest	1	2	3	4	5
i. Of poor weather conditions	1	2	3	4	5
j. I'm afraid of crime	1	2	3	4	5
k. My local parks are too far away	1	2	3	4	5
l. I have no way to get to the park	1	2	3	4	5
m. I'm too busy with other recreation activities	1	2	3	4	5
n. No low-cost public facilities are available	1	2	3	4	5
o. I don't have the skills needed to participate	1	2	3	4	5
p. I don't have a partner(s)	1	2	3	4	5
q. I don't do things outdoors	1	2	3	4	5
r. My health is too poor to visit parks	1	2	3	4	5
s. Park facilities are not well maintained	1	2	3	4	5
t. I'm too busy with work, school, or family	1	2	3	4	5
u. Rules and regulations are too restrictive	1	2	3	4	5
v. I lack the self-confidence to participate	1	2	3	4	5

In this section we are interested in understanding any steps we can take to help you participate more often in outdoor activities. Below are some things that public park systems could do that might help you participate more frequently in outdoor activities. For each of the following, please indicate your level of agreement with each potential strategy by circling your response.

8. Strategies that might help increase frequency of participation include...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Developing parks closer to home	1	2	3	4	5
b. Providing more information about existing parks and programs	1	2	3	4	5
c. Reducing travel time to parks	1	2	3	4	5
d. Providing more public transit	1	2	3	4	5
e. Making parks safer	1	2	3	4	5
f. Providing more activities	1	2	3	4	5
g. Reducing overcrowding	1	2	3	4	5
h. Reducing development of parks	1	2	3	4	5
i. Reducing the costs associated with going to parks	1	2	3	4	5
j. Reducing the costs associated with participation	1	2	3	4	5
k. Increasing development of parks	1	2	3	4	5
l. Offering more programs in local parks	1	2	3	4	5
m. Other:_____	1	2	3	4	5

In this section we are interested in understanding things you could do to increase your outdoor activity participation. Below are some strategies people use to overcome factors limiting their participation. Please indicate your level of agreement with each statement that might reduce your factors limiting your outdoor activity participation.

9. To start or increase my participation in outdoor activities, I could…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Try to budget money for activities	1	2	3	4	5
b. Set aside time for activity	1	2	3	4	5
c. Try to find people with similar interests	1	2	3	4	5
d. Change time of activity participation	1	2	3	4	5
e. Find areas closer to home	1	2	3	4	5
f. Push myself harder to participate	1	2	3	4	5
g. Find inexpensive activities	1	2	3	4	5
h. Ask for help with certain skills	1	2	3	4	5
i. Drop other non-important obligations	1	2	3	4	5
j. Find areas where I feel comfortable	1	2	3	4	5
k. Find areas that are less crowded	1	2	3	4	5
l. Learn more about locations of outdoor activity areas	1	2	3	4	5
m. Find information about recreation activities	1	2	3	4	5
n. Try to learn new activities	1	2	3	4	5
o. Find areas that are safer	1	2	3	4	5
p. Other:_____	1	2	3	4	5

The following questions will help us improve our understanding of residents of Greenville, North Carolina. The information you provide will remain strictly confidential. Your name will never be associated with your answers.

10. What gender do you most closely identify with?

1. Male
2. Female

11. What year were you born?

_____

12. What is your race/ethnicity as reported on the last U.S. Census? (Please circle only one)

1. Black/African American
2. White
3. Asian
4. Hispanic
5. Two or more races
6. Other:_____

13. What is the highest eduaction level you have completed? (Please circle only one)

1. High School (no diploma)
2. High School (diploma)
3. Some college but no degree
4. Associate's degree
5. Bachelor's degree
6. Higher than Bachelor's degree

14. Based on your 2015 income taxes, what is the approximate total income for your entire household last year?

1. less than $20,000
2. $20,000-$39,999
3. $40,000-$59,999
4. $60,000-$79,999
5. $80,000-$99,999
6. $100,000-$119,999
7. $120,000-$139,999
8. $140,000 or more

We would welcome any additional comments you might have about local outdoor activity and facilities in Greenville, NC.

Your contribution to the effort is greatly appreciated. Please return your completed questionnaire in the postage paid envelope as soon as possible. Thank you!

Please direct all inquiries to:

Andrew Frost
Recreation and Leisure Studies
2401 Carol Belk Building
Greenville, NC 27858
(252) 328-5649

Questionnaire #_____ 8