IMPACT OF OUTDOOR ADVENTURE ON THE SELF-ESTEEM, SELF-CONFIDENCE, AND COMFORT LEVEL OF BLACK AND BROWN GIRLS

Nathan Benham

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd

Part of the Social and Behavioral Sciences Commons

Recommended Citation
https://scholarworks.lib.csusb.edu/etd/1673
IMPACT OF OUTDOOR ADVENTURE ON THE SELF-ESTEEM, SELF-CONFIDENCE, AND COMFORT LEVEL OF BLACK AND BROWN GIRLS

A Project
Presented To The
Faculty Of
California State University,
San Bernardino

In Partial Fulfillment
Of The Requirements for The Degree
Master Of Social Work

by
Nathan T. Benham

May 2023
IMPACT OF OUTDOOR ADVENTURE ON THE SELF-ESTEEM, SELF-CONFIDENCE, AND COMFORT LEVEL OF BLACK AND BROWN GIRLS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

by
Nathan T. Benham
May 2023

Approved by:

Dr. Yawen Li M.S.W., Faculty Supervisor, Social Work

Dr. Yawen Li M.S.W., Research Coordinator
ABSTRACT

While there have been many studies that have focused on the effect of outdoor adventure and physical activity on self-confidence and self-esteem for adolescents (Bélanger et al., 2019; Dale et al., 2019; Lubans et al., 2012), there are few that focus solely on adolescent girls (Evans et al., 2020), and even less that focus exclusively on Black and Brown adolescent girls. This study aimed to expand the available data on how outdoor adventure and physical activity impacted self-confidence and self-esteem on Black and Brown adolescent girls. Recruiting participants from Atabey Outdoors, a non-profit outdoor program that specializes in providing outdoor adventure and physical activity for Black and Brown girls aged 8-12, this study utilized pre and post intervention surveys and focus groups to answer the question, “How does participation in Atabey Outdoors affect self-reported self-esteem, self-confidence, and comfort in the outdoors for Black and Brown girls aged 8-12?” Although the sample size was limited, evidence suggests that participation in Atabey Outdoors has a positive impact on an individual’s self-esteem, self-confidence, and comfort in the outdoors. While it is evident that outdoor adventure and physical activity have beneficial impacts on an individual, more studies are needed to address the racial disparities in the current data available.
ACKNOWLEDGEMENTS

I owe the success of this project to my wife. Her love, support, guidance, and fantastic editing skills were with me every step of the way. Her encouragement and questions gave me direction. I will forever be grateful for you.

Another source of inspiration and education came from Dr. Yawen Li. Dr. Li gave me the foundation of knowledge that my research project was supported on. Dr. Li challenged, guided, and celebrated my education experience. Thank you for going on this adventure with me.

Additionally, I want to acknowledge the excitement, professionalism, mission, and dedication of Atabey Outdoors. From the beginning idea to this final submission, Atabey Outdoors has shared their resources and connections.

Finally, I want to acknowledge the participants that engaged in this research project. You are the reason that anyone will read this paper. You are the future of the outdoors. Thank you for your vulnerability and strength.
DEDICATION

This research project is dedicated to all Black and Brown girls that find themselves smiling in the outdoors.
TABLE OF CONTENTS

ABSTRACT ......................................................................................................................... iii

ACKNOWLEDGEMENTS ................................................................................................ iv

LIST OF TABLES ........................................................................................................ viii

LIST OF FIGURES ......................................................................................................... ix

CHAPTER ONE: INTRODUCTION .............................................................................. 1

CHAPTER TWO: LITERATURE REVIEW ................................................................. 6

Outdoor Adventure ........................................................................................................ 6

Outdoor Adventure and Self-Confidence ................................................................. 7

Outdoor Adventure and Self-Esteem ...................................................................... 9

Physical Activity ......................................................................................................... 9

Physical Activity and Self-Confidence ................................................................. 10

Physical Activity and Self-Esteem ...................................................................... 10

Comfort in the Outdoors .......................................................................................... 11

Outdoor Adventure and Physical Activity on Black and Brown Adolescent Girls ................................................................. 12

Theories Guiding Conceptualization ...................................................................... 12

Summary ......................................................................................................................... 14

CHAPTER THREE: METHODS .............................................................................. 15

Study Design ................................................................................................................. 15

Sampling and Participants ....................................................................................... 16

Data Collection and Instruments ........................................................................ 18

Procedures ..................................................................................................................... 19
LIST OF TABLES

Table 1. Participant CRSES scores pre- and post-Atabey Outdoors participation. ........................................................................................................................................................................... 27

Table 2. Participant SEQ-C self-efficacy scores pre- and post-Atabey Outdoors participation. ........................................................................................................................................................................... 29

Table 3. Participant SEQ-C social self-efficacy scores pre- and post-Atabey Outdoors participation. ........................................................................................................................................................................... 31

Table 4. Participant SEQ-C emotional self-efficacy scores pre- and post-Atabey Outdoors participation. ........................................................................................................................................................................... 33

Table 5. Focus group questions, themes, and quotes. ........................................................................................................................................................................... 35
LIST OF FIGURES

Figure 1. Participant CRSES scores pre- and post- Atabey Outdoors participation. .......................................................... 27

Figure 2. Average CRSES survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation. ................. 28

Figure 3. Participant SEQ-C self-efficacy scores pre- and post- Atabey Outdoors participation. ......................................................... 29

Figure 4. Average SEQ-C self-efficacy survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation. ...... 30

Figure 5. Participant SEQ-C social self-efficacy scores pre- and post- Atabey Outdoors participation. ................................................................. 31

Figure 6. Average SEQ-C social self-efficacy survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation. ................................................................. 32

Figure 7. Participant SEQ-C emotional self-efficacy scores pre- and post- Atabey Outdoors participation. ............................................................. 33

Figure 8. Average SEQ-C emotional self-efficacy survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation. ............................................................. 34
Adolescence, when one transitions from child to adult, is a defining period in an individual’s life. This period includes the formation of self-esteem and self-confidence, which are traits that have been shown to impact future mental health (Henriksen et al., 2017; Moksnes & Reidunsdatter, 2019; Morowati Sharifabad et al., 2020). Self-esteem is defined as having satisfaction and respect towards yourself (Merriam-Webster, 2022b). This is illustrated by an individual's level of pride in themselves, continuous belief in themselves despite mistakes, self-perceived social acceptance, and personal acceptance of themselves (The Nemours Foundation, 2018). Self-confidence is described as having confidence in your judgement, behavior, qualities, and abilities (Merriam-Webster, 2022a). This is illustrated by the individual's level of trust in themselves, their skills, and their ability to make the right decision. While self-esteem and self-confidence have a symbiotic relationship there are differences between the two. Namely, self-esteem focuses on the individual's view of themselves, including self-worth, while self-confidence focuses on the individual's confidence in their decision making skill and ability to perform and complete a task, such as biking, hiking, and camping. Supporting the development and reinforcement of an adolescent’s self-esteem and self-confidence is essential to preventative mental health care and can be achieved through outdoor adventure programs.
While there are many techniques to build self-esteem and self-confidence, it has been shown that individuals who engage in physical activity experience an increase in both traits (Dale et al., 2019). By increasing their perceived level of physical fitness through activity, individuals strengthen their perception of themselves, which has been shown to increase self-esteem (Bélanger et al., 2019; Zamani Sani et al., 2016). Through physical activity, the individual has the potential to make lasting impacts on their life.

In addition to physical activity, spending time outdoors is associated with many physical and mental health benefits, such as increasing an individual’s happiness, self-efficacy, and lower perceived stress (Mutz & Müller, 2016; Ryan et al., 2010). When adolescent girls are engaged in the outdoors they often self-report higher levels of self-confidence, self-esteem, self-worth, and self-efficacy (Evans et al., 2020). Further, being outdoors has been shown to increase an individual’s overall physical and mental energy, promoting a healthier life (Ryan et al., 2010).

Although physical activity and spending time outdoors are independently beneficial, when combined in the form of outdoor adventure they jointly build self-esteem and self-confidence within participants. Outdoor adventure refers to physical and leisure recreational activities that are performed outdoors, including but not limited to hiking, canoeing, rock climbing, skiing, nature walks, camping, and biking. Individuals that participate in outdoor adventure programs gain
confidence and self-esteem from the challenges they overcome during the program (Ewert & Yoshino, 2011; Lubans et al., 2012).

To experience the benefits that outdoor adventure provides, an individual needs to engage in the outdoors, and unfortunately not all races are represented equally outdoors, which has created a disparity in the level of comfort that individuals possess in the outdoors. Currently, Caucasians make up nearly 70% of visitors to national wildlife refuges, national forests, national parks, and other outdoor environments (Humphrey, 2020; The Outdoor Foundation, 2021). Black and Brown individuals are severely underrepresented. There are many factors that contribute to the underrepresentation of Black and Brown individuals in the outdoors and outdoor adventure programs. These include the lack of transportation, financial burden of the program, preference for other recreational activities, and systemic racism (Humphrey, 2020). An example of systemic racism is that Black and Brown individuals were not permitted in most public spaces, including state and national parks until the Civil Rights Act of 1964. This has caused deep seeded discomfort and feelings of being unwelcome in public outdoor environments (Humphrey, 2020). The consequence of this historical and ongoing systemic racism has greatly decreased the exposure and comfort levels of Black and Brown individuals in outdoor environments (Goodrid, 2018; Krumrey, 2018; Taylor et al., 2021).

From a social justice standpoint, engaging Black and Brown individuals in outdoor adventure begins to address the underrepresentation of these ethnic
groups in outdoor adventure programs. As Black and Brown girls participate in outdoor adventure and begin building comfort in the outdoors, the disparities between the ethnic groups begin to diminish. This will encourage equal opportunity for preventative mental health care, physical fitness, and future participation in additional outdoor programs across all ethnic groups.

There are many benefits associated with increased confidence and self-esteem including a decreased risk of being diagnosed with a mental health disorder later in life (Masselink et al., 2018). Building the comfort of Black and Brown girls in the outdoors will increase their likelihood of spending more time outside in nature. This has been linked to the increased probability of those individuals contributing to future professional careers in environmental and biological sciences (O’Brien et al., 2020).

Atabey Outdoors is an outdoor adventure program that combines physical activity with outdoor environments as an intervention approach to increase the self-confidence and self-esteem of Black and Brown girls aged 8-12. Additionally, Atabey Outdoors aims to increase the likelihood that Black and Brown girls will engage in future outdoor adventure by increasing their comfort level in outdoor environments. Atabey Outdoors intends to achieve this goal through client participation in a weekly program that combines journaling, group discussion, and outdoor activities. The outdoor activities that are included in the program include walks, hikes, outdoor cooking, outdoor hygiene and first aid, paddle boarding, outdoor yoga, camping, mountain biking, ice skating, and rock
climbing. This study intends to investigate the impact of the Atabey Outdoors on participants by collecting data through the use of surveys and focus groups to assess self-reported self-confidence, self-esteem, and comfort in the outdoors. Such information will be critical in helping the organization improve and grow their program.

By better understanding Atabey Outdoors’s impact, the program can be adjusted and or enhanced as needed to change or grow. The empirical data gained through this study can also be used as supporting evidence for program effectiveness. Evidence indicating that the program is successful could increase Atabey Outdoors’s financial opportunities through grants and donations. Grants and donations will aid Atabey Outdoors in addressing the systemic racism of outdoor spaces and outdoor adventure and work to close the ethnicity gap. With that said, the research question for this project is as follows: How does participation in Atabey Outdoors affect self-reported self-esteem, self-confidence, and comfort in the outdoors for Black and Brown girls aged 8-12?
CHAPTER TWO:  
LITERATURE REVIEW

This chapter will examine literature focusing on the effect that outdoor adventure and physical activity have on self-confidence and self-esteem, specifically in Black and Brown adolescent girls. This chapter also examines how an individual can build comfort in the outdoors by establishing a connection to the outdoors. The first two subsections center on outdoor adventure and physical activity. These subsections each review the effect that these activities have on self-confidence and self-esteem and identify potential gaps in research. The third subsection focuses on understanding how and when comfort in the outdoors is built. The final subsection identifies and elaborates on the use of Bandura’s self-efficacy theory and experiential education to understanding the impact of outdoor activity on self-confidence, self-esteem, and comfort in the outdoors.

Outdoor Adventure

Outdoor adventure programs have an extensive history, most notably starting with Kurt Hahn and the conception of Outward Bound in 1941. During World War II, many young sailors were dying at sea while the older, more experienced sailors were surviving. As a result, Outward Bound was created to address the lack of life experiences in the younger sailors. Hahn believed that Outward Bound was providing “training for all through the seas rather than for,”
meaning that Kurt Hahn was not teaching lessons on how to be a sailor, instead he was using the outdoor environment to enable character development (Veevers & Allison, 2011). Outward Bound has evolved since World War II to include programs throughout the world. While the need for Outward Bound as changed, the desired outcome regarding character development remains the same. Many programs have followed suit in promoting character development through outdoor adventure. These programs include but are not limited to the National Outdoor Leadership School, Girl Scouts, Elements Wilderness Program, and Atabey Outdoors.

Mutz & Müller (2016) identified four themes that are characteristic of outdoor adventure programs. These themes include being in an unfamiliar outdoor environment, challenging activities that typically involve teamwork, small group environments, and participants being led by a skilled leader focusing on safety and emotional support. The combination of these themes enables the participant to leave their comfort zone and enter their growth zone. The growth zone is where the individual experiences the combined benefits of physical exercise and participation in outdoor adventure programs.

Outdoor Adventure and Self-Confidence

There are many factors that contribute to the impact of outdoor adventure on an individual’s self-confidence when participating in outdoor adventure programs. Evans et al. (2020) promotes that single-gender environments are
more conducive to building self-confidence than mixed genders. This concept builds off of the research done by Anderson et al. (2014) that states that all-female leisure activities contribute to a decrease in unhealthy competition, decrease in embarrassment and intimidation when trying new activities, and an increase in community building. The benefits of a single-gender participatory group encourage the participant to leave their comfort zone and enter their growth zone. Once in the growth zone, the participants are more likely to find success in a challenging activity and build confidence in their abilities.

Outdoor adventure programs also provide the participant with opportunities to build relationships with the other participants and staff. When the individual feels connected to other members of the group, they are more likely to feel comfortable engaging in challenging activities. These relationships also promote giving and receiving support which encourages and assists in building self-confidence. The relationship between the participant and the staff is also an important relationship to foster. Often the participant views the staff as a role-model and this further cultivates self-confidence (Evans et al., 2020).

In addition, self-confidence increases when an individual completes or witnesses another member complete a task that was initially perceived as being too challenging. Self-confidence that is built in this manner has potential to translate to other aspects of the participants lives. It encourages the participant to reflect on the question, If I can do that, what else can I do (Mutz & Müller, 2016)?
Outdoor Adventure and Self-Esteem

While there are studies that focus on the effect outdoor adventure programs have on self-esteem, there are few in number. An individual’s level of self-esteem grows when they are provided with opportunities to build confidence in their physical abilities (Chang et al., 2019). For instance, when an individual engages in outdoor activity, confidence in their abilities grows and in turn promotes self-respect and builds self-esteem.

Another contributor to strengthening self-esteem comes from an individual’s sense of belonging within the outdoor adventure community. The community building aspect of outdoor adventure helps build acceptance of oneself through witnessing others accept them as individuals and into the community (Ewert & Yoshino, 2011; Warber et al., 2015). This allows the individual to build self-respect and self-esteem.

Physical Activity

A study by Zamani Sani et al. (2016) states “physical activity is defined as any bodily movement produced by the contraction of skeletal muscles that results in a substantial increase in energy expenditure over resting levels.” In other words, there are many movements that can be categorized as physical activity ranging from walking to mountain biking.
Physical Activity and Self-Confidence

There is a positive relationship between the amount of physical activity that an individual engages in and their level of self-confidence (Ilhan & Bardakci, 2020). It has been shown that providing praise and affirmations while completing a physical activity has a positive impact on an individual’s level of self-confidence (Williams & French, 2011). Many of the current studies focus on how a high level of self-confidence increases the likelihood of engaging in physical activities. However, in recent years, there have not been enough research dedicated to the connection between physical activity and self-confidence in adolescents, specifically in minority adolescents.

Physical Activity and Self-Esteem

Research indicates that physical activity has one of two effects on self-esteem. It will either positively impact self-esteem (Dale et al., 2019; Lubans et al., 2012; Zamani Sani et al., 2016) or neutrally impact self-esteem (Biddle et al., 2019; Dale et al., 2019). Often self-esteem is strengthened as a result of building confidence during a physical activity, which then builds self-worth (Knapen et al., 2005). Although studies vary on whether physical activity positively or neutrally affect self-esteem, they are in agreeance that self-esteem is not negatively associated with healthy physical activity. Unfortunately, the majority of this research focuses on adults and teens, leaving a gap in research focusing on adolescent physical activity and self-esteem, especially in Black and Brown girls.
Comfort in the Outdoors

Research has shown that an individual’s initial relationship with the outdoors and comfort in the outdoors tends to peak before the age of twelve (Carrier & Stevenson, 2017). An individual’s relationship with the outdoors is defined as having a connection to the outdoors. After having a positive outdoor experience, individuals under the age of twelve retain the positive connection and comfort for up to four weeks, while older children’s connection and comfort dissipate at a faster rate (Carrier & Stevenson, 2017). By introducing children ages twelve and under to the outdoors, youth can gain lasting impacts and benefits from the outdoors.

There are three ways that an individual can connect and build comfort with the outdoors. 1. Direct experiences- these experiences are firsthand physical interactions with the outdoors. These experiences are unstructured and provide the individual with the ability to self-discover the outdoors. 2. Indirect experiences- while these experiences are typically physical interactions, they are structured or restricted with less ability to self-discover the outdoors. 3. Vicarious experiences- these experiences do not involve any physical interaction with the outdoors, instead they are focused on connecting the individual to the outdoors through mixed media. Direct experiences enable the individual to build the strongest connection and comfort with the outdoors (Carrier & Stevenson, 2017).

Often an individual’s lack of comfort in the outdoors stems from their fear of the unknown and the associated risks. Through direct experience with the
outdoors, an individual will generally have a decrease in fear due to an increase in familiarity. The decrease in fear translates to an increase in comfort and confidence in their abilities and with the environmental factors in the outdoors. This enables the individual to increase their opportunities to gain the self-esteem and self-confidence benefits of the outdoors (Ward & Hobbs, 2006).

**Outdoor Adventure and Physical Activity on Black and Brown Adolescent Girls**

While there are studies that focus on the effect that outdoor adventure and physical activity have on self-confidence and self-esteem for adolescents (Bélanger et al., 2019; Dale et al., 2019; Lubans et al., 2012), there are very few that focus solely on adolescent girls (Evans et al., 2020), and even less that focus exclusively on Black and Brown adolescent girls. This study aims to expand the available data focusing on how outdoor adventure and physical activity impact self-confidence and self-esteem on Black and Brown adolescent girls. Additionally, there is a lack of research regarding comfort in the outdoors for Black and Brown adolescent girls. This study will also help us better understand how self-confidence and self-esteem can translate to comfort in the outdoors.

**Theories Guiding Conceptualization**

The theories that have guided past studies include Bandura’s self-efficacy theory and experiential education. Bandura’s self-efficacy theory states that an individual builds self-efficacy/confidence through successfully completing tasks,
observing others like themselves successfully completing tasks, being verbally affirmed that they can succeed, and experiencing emotional/physiological responses to a situation or event (Bandura, 1977). Atabey Outdoors uses the framework of this theory while teaching the skills required to be successful at any given outdoor and emotional task. This enables the participant to build self-efficacy/confidence through completing the tasks and allows for others to observe the success as well. Atabey Outdoors also uses affirming communication to reinforce the participants accomplishments. Through group conversations and debriefing, Atabey Outdoors works to maintain a positive learning environment to assist in the emotional and physiological responses to situations and events.

Experiential education is a method of learning through transformative experiences (Beard, 2018). This method of education allows for the participant and facilitator to assign meaning to an activity. The assigned meaning allows for the individual to use self-reflection to assist in their personal growth. By using the activity as the method of teaching growth, the participant has the ability to change their emotions and self-beliefs based on the progress shown through the activity. Experiential education also focused heavily on the role of the facilitator. The facilitator assumes the role of mentor, coach, boundary setter, reflection guider, and safety manager (Beard, 2018). Atabey Outdoors bases its learning approach on experiential education. Atabey Outdoors assigns meaning to activities and debriefs each activity with the participants to distill all potential
learnings. Atabey Outdoors trains their staff to occupy the roles required for experiential education.

Summary

This study will expand the data available on how outdoor adventure and physical activity impact self-confidence, self-esteem, and comfort in the outdoors for Black and Brown adolescent girls. Research has shown that outdoor adventure and physical activity are individually beneficial, however this study aims to observe the combined benefits when applied in tandem. The potential positive benefits are immense. This study seeks to measure and document these benefits for Black and Brown adolescent girls when engaging in the outdoor activities provided by Atabey Outdoors.
CHAPTER THREE:

METHODS

This chapter details how data were collected, and the procedures required to ensure high data quality. The sections discussed in this chapter are study design, sampling, data collection instruments and procedures, protection of human subjects, and data analysis.

Study Design

The purpose of this study is to identify the impact that participation in Atabey Outdoors has on self-reported self-esteem, self-confidence, and comfort in the outdoors for Black and Brown girls aged 8-12. This study serves as a program evaluation for Atabey Outdoors using mixed methods research design. This study used a combination of open-ended questions and multiple-choice surveys to collect data regarding self-esteem and self-confidence, and comfort in the outdoors. The study received a full board approval from the Institutional Review Board (Appendix A).

This study was a longitudinal program evaluation that utilized data that were collected prior to engagement with intervention and at timed intervals after the intervention. Prior to engaging in Atabey Outdoors, the participants completed designated surveys that measured self-esteem and self-confidence. The participants were asked to retake the surveys after completion of every Atabey Outdoors program, referred to as an intervention, they attended during
the data collection period. In addition, twice during the data collection period, the participants engaged in a focus group consisting of five open-ended questions. The questions explored their comfort level outdoors as well as provided programmatic feedback. These questions provided the participant the ability to freely express their level of outdoor comfort without the constraints of a measuring scale.

The researcher provided training to Atabey Outdoors’s program staff so that they could assist the participants without bias and interference to the integrity of the study. The training included providing methods of clarifying the survey questions without creating an environment in which the participant would feel inclined to answer a certain way. In addition, the program staff were instructed to give the participants adequate space and time to complete the survey to void location and time constraints.

Sampling and Participants

This study focused on 8-12 year old Black and Brown girls in Phoenix, Arizona that voluntarily participated in Atabey Outdoors’s programming. Black and Brown included Black and Indigenous people, and girls of color- specifically, American Indian or Alaska Native, Asian, Black or African-American, Latinx or Hispanic, Native Hawaiian or Pacific Islander, and Multi-racial. Atabey Outdoors is a nonprofit in Phoenix, Arizona that was founded in 2021. Atabey Outdoors was created to address the historical lack of outdoor adventure opportunities for
Black and Brown adolescent girls. Atabey Outdoors engages participants in physical activity through a multitude of outdoor activities at little to no cost to the participants. The programs provided by Atabey Outdoors are designed to fulfill its mission,

*We commit to providing safe & fun outdoor adventures for BIPOC girls ages 8 to 12. We combine outdoor adventure with enrichment activities that encourage social, emotional, physical and mental growth.* (Atabey Outdoors, 2021)

In 2020, Phoenix had a population size of approximately 1,608,139 people. Females were represented almost equally when compared to males with approximately 50% of the population being female. Additionally, about 26% of the population was under 18 years of age. Nearly 43% of the population self-identify as being Hispanic or Latino while 7% identify as being solely Black or African American (United States Census Bureau, 2020). These data allow for estimates to be made regarding the potential population that can elect to participate in the programs offered through Atabey Outdoors. In 2021, Atabey Outdoors served twenty-nine Black and Brown girls aged 8-12.

The opportunity to participate in this study was extended to all individuals that selected to participate in Atabey Outdoors’s programming if they met the selection criteria of being Black or Brown girls aged 8-12.
Data Collection and Instruments

In this study, the independent variable (IV) is the amount of participation in Atabey Outdoors’s adventure programs and the dependent variables (DV) are self-reported self-esteem, self-confidence, and comfort in the outdoors. Self-esteem was measured using the child version of Rosenberg Self-Esteem Scale (CRSES) questionnaire (Appendix B). The CRSES is a 10-item questionnaire that has been modified from the original Rosenberg Self-Esteem Scale that measures positive and negative self-feelings. The CRSES was modified to better assess individuals 7-12 years of age. Each question used a Likert scale with answers ranging from “very true” to “definitely not true.” Upon completion, each answer was scored from 1 to 4 depending on the participant’s response. The scores were then summed; a higher total score represented a higher level of self-esteem for each participant. The highest score possible was 40 and the lowest was 10. The CSRES has a Cronbach’s alpha of 0.76 (Wood et al., 2021).

Self-confidence was measured by a modified version of the Self-Efficacy Questionnaire for Children (SEQ-C) (Appendix C). The modified SEQ-C consisted of 16-questions that assessed social self-efficacy and emotional self-efficacy. The modified SEQ-C removed the original 8 questions regarding academic efficacy. Each question used a Likert scale with answers ranging from “very well” to “not at all.” Upon completion, each answer was scored from 1 to 5 depending on the participant’s response. The scores of the 16-questions were then added together; a higher total score represented a higher level of self-
efficacy and confidence. The highest possible score when looking at both social and emotional efficacy was 80 and the lowest was 16. When scoring social and emotional efficacy separately, the highest possible score for was 40 and the lowest was eight. The Cronbach’s alpha for social efficacy is 0.82 and the Cronbach’s alpha for emotional efficacy is 0.86 (Suldo & Shaffer, 2007).

Data on comfort in the outdoors and physical activity was collected through two focus groups each consisting of five open-ended questions.

1. How has participating in Atabey Outdoors changed your views on being outdoors?
2. How do you think Atabey Outdoors has prepared you to engage in future outdoor activities?
3. How would you describe your physical activity today compared to days when you're not engaging in Atabey Outdoors?
4. What is your favorite thing about Atabey Outdoors?
5. What is your least favorite thing about Atabey Outdoors?

Procedures

During online registration for Atabey Outdoors's weekly programing, participants and their guardians had the opportunity to volunteer to participate in this study by answering "Yes" or "No" when answering the question "Are you interested in learning more about a current study exploring the connection between Atabey Outdoors and self-esteem, self-confidence, and comfort in the outdoors?". If "Yes" was selected, they were directed to a Google form created
by the researcher. This form provided details about the study and the necessary forms to obtain informed consent (Appendix D) and a child assent form (Appendix E). After obtaining the required signatures, the researcher was notified via email of the completed paperwork. The researcher proceeded to send the participants an email with a link to a Google form containing the surveys and basic demographic questions such as age, ethnicity, and gender to ensure they met the requirements of the study. The survey consisted of the CSRES and SEQ-C and was used to establish the participants' baseline data.

To improve awareness of the study and increase sample size, the researcher provided Atabey Outdoors with informational flyers with a unique QR code directing the participants to the required online participation forms. The researcher also created an informational video for Instagram that introduced himself to the program's followers, as well as detailed the purpose and goal of the study. The promotional video ended with an invitation to join the study.

If an individual arrived at the program and wanted to engage in the study and had not previously filled out the online consent/assent and survey, Atabey Outdoors's staff read a script prepared by the researcher. The script provided the participant and their legal guardian with the necessary information to participate in the initial online consent/assent and survey. If an individual and their legal guardian were interested in joining the day of the focus groups, the researcher was on location and provided the individual and their legal guardian with a
modified informed consent and child assent form that focused solely on focus group participation (Appendix F).

Post-intervention data was collected after every Atabey Outdoors program (i.e., Observation intervals (O) and Intervention intervals (x): O1 x O2 x O3 x O4…) To collect post-intervention data, participants recorded their responses on a physical hardcopy of the survey at the conclusion of the weekly event. Prior to the start of the event, the researcher notified Atabey Outdoors which participant to distribute the surveys to at the program’s daily conclusion. Surveys took no more than ten to fifteen minutes for the participants to finish.

Additional training was provided to Atabey Outdoors’s program staff by the researcher on how to deliver the forms without persuasion or bias. This was conducted through a Zoom training hosted by the researcher and was attended by Atabey Outdoors program staff involved in the study. In addition, the researcher supplied the Atabey Outdoors staff with a written script. The script included information about the purpose of the survey, the approximate time needed to complete the survey, and where to return their completed survey. Participants were informed that participation was voluntary, and nonparticipation would not impact their future involvement in the program or study.

Twice during the data collection period, the researcher attended Atabey Outdoors’s weekly programming to observe and build rapport with the participants prior to facilitating the focus group. The first attended and observed event was on November 5th, 2022, in which the participants engaged in an event
that focused on introducing and practicing the basics of camping. The second attended and observed event was on December 10th, 2022, in which the participants explored the Desert Botanical Garden.

At the conclusion of each of these attended and observed events, the researcher facilitated a focus group with the selected participants. The focus group occurred immediately after the conclusion of the week of programming. The focus groups lasted approximately thirty minutes in length. Focus group participants consisted of individuals that chose to engage in the surveys and those that elected to participate solely in the focus groups. The researcher facilitated a conversation that included asking the open-ended questions and receiving responses from each participant.

Protection of Human Subjects

Individuals that opt-in to the study were informed that their identity would be confidential outside of Atabey Outdoors, but not within Atabey Outdoors due to their visual engagement after the weekly programming. However, the data they provided are confidential. A pseudonym was given to each participant to protect their identity. The participants and their legal guardians were made aware of the limits of participation confidentiality within the program via the informed consent and child assent forms. Additionally, the participants and their legal guardians approved the addendum to the informed consent and child assent forms, which enabled formal use of the organization's name, Atabey Outdoors, in
publication (Appendix G). The Institutional Review Board approved the addition of the addendum through their modification process (Appendix H). Also, the participants and their legal guardians were reminded throughout the data collection period that their participation was optional and discontinuing their involvement with the study would not have an impact on their future engagement with Atabey Outdoors.

All physical forms (consent, assent, survey, etc.) were stored in a securely locked box. After completion of the weekly Atabey Outdoors program, participants were instructed to return their completed physical surveys in a securely locked box. The locked box was only opened by the researcher to retrieve the completed surveys. With prior approval, audio recording devices were also used to collect data during the focus groups. The audio files were securely transferred from the recording device to a password-protected computer. All data collected for this study will be securely stored until its deletion three years after the data collection period.

While completing the physical surveys, participants were encouraged to not share answers and remain separated until everyone’s completion. Precautions were taken to mitigate the risk of COVID-19 contraction such as social distancing, mask wearing, and self-screening for symptoms. This study followed local, state, federal, and agency COVID-19 regulations.
Data Analysis

All data gathered from the focus group were collected via note taking and audio recording. The data were then sorted into five categories based on the question. For each question, the data were analyzed for themes relating to comfort in the outdoors, self-esteem, and self-confidence. The researcher coded and categorized the data, and then identified major themes and sub-themes of the participants’ responses after participating in Atabey Outdoors programs.

The quantitative data collected using questionnaires were entered into Excel for analysis. Every participant was given a pseudonym for their individual identification. Data were inspected for errors and cleaned accordingly. A descriptive analysis was conducted to describe the characteristics of the samples. A change score was calculated by comparing the post-test with the pre-tests scores. A one-way ANOVA analysis was conducted to examine the relationship between IVs and changes in DVs. This was conducted for both the CRSES and the SEQ-C as well as individually on the two efficacy aspects of that make up the SEQ-C.

Summary

This study examined the impact that participation in Atabey Outdoors had on an individual’s self-reported self-esteem, self-confidence, and comfort in the outdoors. This was done through establishing the individual’s baseline self-reported self-esteem, self-confidence and then proceeding to gather additional
information as the participant increased their engagement in the programs offered through Atabey Outdoors. In addition, the participant’s comfort in the outdoors as well as programmatic feedback were explored through two focus groups. A mixed methods approach was utilized in gathering the required data needed to answer the posed research question.
CHAPTER FOUR:
RESULTS

A total of five participants were recruited during the four-month recruitment period (September 2022 to December 2022). All five participants identified themselves as Black or Brown: two further identified themselves as African American, one as Afro-Indigenous, and two did not further identify. All five participants were within the age requirements of 8-12 years old: two participants further identified that they were eight years old, one stated that they were nine years old, and the remaining two did not further specify their age. All five participants identified themselves as being female. Of the five participants three of them engaged in both the surveys and the focus groups, the remaining two participants elected to only engage with one of the focus groups.

CRSES (Self-esteem)

Three participants engaged in completing the pre-Atabey Outdoors participation survey and the post-Atabey Outdoors participation surveys. Two participants (Sierra and Linda) attended four Atabey Outdoor events in which they completed a post participation survey and one participant (Samantha) completed two post-Atabey Outdoors participation surveys (Table 1). All three participant’s scores slightly increased from the initial pre-Atabey Outdoors participation to their last post-Atabey Outdoors participation (Table 1 and Figure
1). The participants’ mean score increased from 34.7 pre-Atabey Outdoors participation to 35.5 post-Atabey Outdoors participation (Figure 2), however the increase was not statistically significant ($p = 0.976$).

Table 1. Participant CRSES scores pre- and post-Atabey Outdoors participation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Atabey Outdoors</th>
<th>Post-Atabey Outdoors 1</th>
<th>Post-Atabey Outdoors 2</th>
<th>Post-Atabey Outdoors 3</th>
<th>Post-Atabey Outdoors 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra</td>
<td>29</td>
<td>26</td>
<td>30</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>Samantha</td>
<td>39</td>
<td>36</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda</td>
<td>36</td>
<td>39</td>
<td>40</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

Figure 1. Participant CRSES scores pre- and post- Atabey Outdoors participation.
Figure 2. Average CRSES survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation.

SEQ-C (Self-confidence)

The SEQ-C survey was utilized to measure the participants self-efficacy which translates to self-reported self-confidence. Three participants engaged in completing the pre-Atabey Outdoors participation survey and the post-Atabey Outdoors participation survey. Two participants (Sierra and Linda) attended four Atabey Outdoor events in which they completed a post-participation survey and one participant (Samantha) completed two post-Atabey Outdoors participation surveys (Table 2). Two participant’s (Sierra and Linda) overall scores increased, and one participant’s (Samantha) overall score decreased from the initial pre-Atabey Outdoors participation to their last post-Atabey Outdoors participation (Table 2 and Figure 3). Despite the lack of overall score increases, the average overall score increased from 54.3 pre-Atabey Outdoors participation to 66 post-
Atabey Outdoors participation (Figure 4). These results were not statistically significant ($p = 0.822$).

Table 2. Participant SEQ-C self-efficacy scores pre- and post-Atabey Outdoors participation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Atabey Outdoors</th>
<th>Post-Atabey Outdoors 1</th>
<th>Post-Atabey Outdoors 2</th>
<th>Post-Atabey Outdoors 3</th>
<th>Post-Atabey Outdoors 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra</td>
<td>36</td>
<td>44</td>
<td>50</td>
<td>53</td>
<td>56</td>
</tr>
<tr>
<td>Samantha</td>
<td>55</td>
<td>55</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda</td>
<td>72</td>
<td>66</td>
<td>67</td>
<td>76</td>
<td>76</td>
</tr>
</tbody>
</table>

Figure 3. Participant SEQ-C self-efficacy scores pre- and post- Atabey Outdoors participation.
The SEQ-C is comprised of two self-efficacy surveys: social and emotional. Participant Sierra’s social self-efficacy score increased, and Samantha and Linda’s social self-efficacy scores decreased from the initial pre-Atabey Outdoors participation to their last post-Atabey Outdoors participation (Table 3 and Figure 5). The average score of social self-efficacy slightly increased from 30.67 pre-Atabey Outdoors participation to 31 post-Atabey Outdoors participation (Figure 6) and was not statistically significant ($p = 0.998$).
Table 3. Participant SEQ-C social self-efficacy scores pre- and post-Atabey Outdoors participation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Atabey Outdoors</th>
<th>Post-Atabey Outdoors 1</th>
<th>Post-Atabey Outdoors 2</th>
<th>Post-Atabey Outdoors 3</th>
<th>Post-Atabey Outdoors 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Samantha</td>
<td>33</td>
<td>32</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda</td>
<td>37</td>
<td>33</td>
<td>34</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Figure 5. Participant SEQ-C social self-efficacy scores pre- and post- Atabey Outdoors participation.
Figure 6. Average SEQ-C social self-efficacy survey scores for each pre- and post-Atabey Outdoors participation event. Brackets indicate standard deviation.

Regarding the emotional self-efficacy survey, two participants’ (Sierra and Linda) emotional self-efficacy scores increased, and one participant’s (Samantha) emotional self-efficacy score decreased from the initial pre-Atabey Outdoors participation to their last post-Atabey Outdoors participation (Table 4 and Figure 7). The average score of emotional self-efficacy score increased from 23.67 pre-Atabey Outdoors participation to 35 post-Atabey Outdoors participation (Figure 8) and the results were not statistically significant (p = 0.398).
Table 4. Participant SEQ-C emotional self-efficacy scores pre- and post-Atabey Outdoors participation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Atabey Outdoors</th>
<th>Post-Atabey Outdoors 1</th>
<th>Post-Atabey Outdoors 2</th>
<th>Post-Atabey Outdoors 3</th>
<th>Post-Atabey Outdoors 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra</td>
<td>14</td>
<td>20</td>
<td>24</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Samantha</td>
<td>22</td>
<td>23</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda</td>
<td>35</td>
<td>33</td>
<td>33</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Figure 7. Participant SEQ-C emotional self-efficacy scores pre- and post- Atabey Outdoors participation.
Figure 8. Average SEQ-C emotional self-efficacy survey scores for each pre- and post- Atabey Outdoors participation event. Brackets indicate standard deviation.

Focus Groups (Comfort in the Outdoors)

Over the course of the data collection period, two focus groups were conducted on November 5th, 2023, and December 10th, 2023. At the conclusion of the “Intro to Camping” programming that was run by Atabey Outdoors on November 5th, 2023, the researcher facilitated a focus group with three participants, Sierra, Samantha, and Linda. The second focus group on December 10th, 2023, was facilitated at the conclusion of participants’ engagement with Atabey Outdoors’s programming at the Desert Botanical Garden. This focus group consisted of two repeat participants (Sierra and Linda) and two additional participants that elected to only participant in the focus group (Rosemary and Emilia). Table 5 highlights the main themes that were identified in the analysis of each question and selected quotes that reinforce the themes.
<table>
<thead>
<tr>
<th>Question</th>
<th>Themes</th>
<th>Quotes</th>
</tr>
</thead>
</table>
| How has participating in Atabey Outdoors changed your views on being outdoors? | 1. Increase in comfort in the outdoors  
2. Increase in desire to engage in outdoor activities | “Now since I do Atabey Outdoors it makes me feel good about the outside and want to play outside more and be outside more.”  
“When I first got introduced to Atabey I was really scared and nervous cause I didn’t know anybody but then now since I know more people, I feel like I can do a lot of things [outside].”  
“I am very comfortable being outdoors.”  
“It changed my view because I like coming outside more and exploring more things.”  
“It makes me want to go outside more and play outside.”  
“It shows me that there's a lot of things that you can do outdoors.”  
“I feel like I can do a lot of things.” |
| How do you think Atabey Outdoors has prepared you to engage in future outdoor activities? | 1. Learned technical skills  
2. Confidence in learned skills | “First time I did it, I wasn’t really prepared, and I was kind of panicking and now since” |
3. Reduction of anxiety and nervousness

I know what I have to have and what to do. I feel like I could anything outdoors. Like if I have all the stuff that I need, and I’m prepared I feel like I can do anything.”

“It helps me to know how to do things better and know how to build a tent or bike or kayaking”

“That I’m not that nervous and that it’s okay to try stuff and that if you don’t want to try it don’t let anyone force you to do it, but like just give it a little shot and if you don’t want to do it anymore that’s okay.”

“Learned how to build a tent. Because I never knew how to build a tent because they are hard. How to start a campfire. How to use the restroom [outdoors].”

“Help me know what I need to go out camping.”

<table>
<thead>
<tr>
<th>How would you describe your physical activity today compared to days when you’re not</th>
<th>Increase in physical activity</th>
<th>Physical activity with a community</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increase in physical activity</td>
<td>“When I am with girls or people who have matched my energy and I can talk to and interact with it makes me feel”</td>
<td>2. Physical activity with a community</td>
</tr>
</tbody>
</table>
**engaging in Atabey Outdoors?**

<table>
<thead>
<tr>
<th>1. Frequency of programing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Being outside</td>
</tr>
<tr>
<td>3. Learning new skills</td>
</tr>
<tr>
<td>4. Building a community</td>
</tr>
<tr>
<td>5. Outdoor activities</td>
</tr>
</tbody>
</table>

more happy and I want to go play. I want to run around. I want to play games with them.”

“Normally I just sit at home and watch tv.”

“I was more active today. When I am not at Atabey, I just take a shorter walk around.”

“When I’m with Atabey, I think that I’m doing more activities outside...like going rock climbing outside”

**What is your favorite thing about Atabey Outdoors?**

“Getting to hang out outside. Going rock climbing outside.”

“I love all of the adventures we get to do and it just makes me feel really happy when I get to explore around and I really like when we get to practice stuff so we are prepared for when we actually do it... I know more people I feel like I can do a lot of things.”

“Spring camping and eating. And animals and other cool things that I
like. Gardening. Of course, hiking it's my most favorite things.”

“Going outside and doing rock climbing and swimming.”

“I get to go outdoors almost every weekend.”

“[Atabey Outdoors] actually takes us on adventures and like we go out and do stuff and be active and we don’t stay inside and do stuff that is not active. I really like that Atabey Outdoors actually has fun stuff and entertaining stuff. The other programs that I have been to weren’t really that fun.”

| What is your least favorite thing about Atabey Outdoors? | 1. Outdoor temperatures  
2. Using the bathroom outside  
3. Bugs | “I don’t want to be hot, but I don’t want to be cold and bugs.”  
“When it’s super cold. I have to bundle up and I don’t like that.”  
“Bugs” |
Changed Views on Being Outdoors

All five individuals that participated in the focus groups reported an increase in comfort in the outdoors. Participants stated that they felt less anxiety and worry in the outdoors after engaging with Atabey Outdoors. In addition, participants reported that they found more comfort in the outdoors when they were a part of a group of peers. Participants further elaborated by stating their outdoor engagement and desire for future outdoor engagement have increased since participating in Atabey Outdoors.

Prepared for Future Outdoor Activities

The participants all reported feeling an increased sense of confidence in their outdoor living skills. Participants reported that Atabey Outdoors provided them with the required learning to feel comfortable camping outdoors. This was further elaborated by participants stating that due to the outdoor camping and technical skills they had learned at Atabey Outdoors, they felt more willing to engage in the outdoors. In addition, it was stated that they are more willing to try new activities because Atabey outdoors helped them reduce their panic and feel like they can accomplish anything. The majority of participants stated that they entered into the program not knowing the skills required to engage in outdoor activities and now they have gained knowledge in camping, biking, kayaking, and rock climbing.
Physical Activity at Atabey Outdoors

The participants indicated that they experience an increase in physical activity at Atabey Outdoors when compared to days without Atabey Outdoors. They stated that when they are engaging with Atabey Outdoors they experience more outdoor related activities like rock climbing, biking, hiking, and kayaking. When discussing days without Atabey Outdoors they stated that they are not as physically active and often spend their free time on the couch watching television. It was also noted that they are more willing and excited to engage in outdoor activities because of their community of friends that also participate in Atabey Outdoors.

Favorite Aspect of Atabey Outdoors

It was unanimously stated that their favorite aspect of Atabey Outdoors was the variety of activities and adventures they could participate in. The participants stated that they enjoyed learning about a skill and then being able to apply that knowledge in the field. They especially enjoyed the camping trips and rock climbing experiences. They also enjoyed the community of peers that attend Atabey Outdoors. All the participants stated that they enjoyed being outdoors in nature.

Least Favorite Aspect of Atabey Outdoors

Besides one participant sharing their dislike of the yoga activity, the participants did not share aspects of Atabey Outdoors’s programming that they disliked. Instead, they shared their least favorite things about the environment
that Atabey Outdoors operates in. All the participants shared their dislike for bugs and the range of temperatures that they might experience. They stated that they disliked sweating in the heat and bundling up in the cold.
CHAPTER FIVE:
DISCUSSION

This study provided an in-depth evaluation of Atabey Outdoors through the eyes of their participants. The perspectives shared highlight the immense benefits that participation in outdoor adventure facilitated by Atabey Outdoors had on young girls’ self-reported self-confidence, self-esteem, and comfort in the outdoors.

While the results of the CRSES and SEQ-C were not statistically significant, the trajectory of the data was clear. The data supported an upward trend of increased self-confidence and self-esteem after participating in the outdoor adventure activities provided by Atabey Outdoors. In addition, the responses given during the focus groups provided substantial evidence of the positive impact that Atabey Outdoors has on its participants’ self-confidence and self-esteem. Atabey Outdoors promoted the growth of self-confidence through the relationships that were fostered in the single-gender programming. Evans et al. (2020) and Anderson et al. (2014) found that these relationships provide a healthy framework for young girls to ask for and offer support. In addition, Atabey Outdoors created an environment where Black and Brown girls built their self-confidence on a foundation of repetitive small successes. This paralleled the findings from Mutz & Müller (2016) that highlights the mentality, if I can do that, what else am I capable of mentality. This was evident from Samantha’s quote during the focus group,
“The first time I did it [Atabey Outdoors], I wasn’t really prepared, and I was kind of panicking and now since I know what I have to have and what to do. I feel like I could anything outdoors. Like if I have all the stuff that I need, and I’m prepared I feel like I can do anything.”

Due to the weekly programing, the participants of Atabey Outdoors formed a healthy and supportive community. When the researcher observed the group, it was clear to see that the participants encouraged, supported, and challenged each other to engage in the physical activities. Similarly, Chang et al. (2019), Ewert & Yoshino (2011), and Warber et al. (2015) concluded that these types of interactions appeared to have immense benefits on the participant’s self-esteem and comfort in the outdoors, which in turn increased their willingness to engage in outdoor activities. Samantha vocalized this benefit when she stated the following,

“When I first got introduced to Atabey I was really scared and nervous cause I didn’t know anybody but then now since I know more people, I feel like I can do a lot of things.”

“When I am with girls or people who have matched my energy and I can talk to and interact with it makes me feel more happy and I want to go play. I want to run around. I want to play games with them.”
In addition to the outdoor activities, Atabey Outdoors relied on the use of physical activities to build self-confidence, self-esteem, and comfort in the outdoors. Atabey Outdoors’s physical activity programming includes hiking, camping, kayaking, paddle boarding, biking, rock climbing, and nature walks. The staff at Atabey Outdoors intentionally provided the participants with frequent affirmations, especially when the participant was attempting a new physical activity. This method of facilitation promoted the participant’s overall willingness to engage in physical activity and encouraged them to continue engaging post-Atabey Outdoors. By providing the participants with the skills to continue their engagement in future activities without the assistance of Atabey Outdoors, the participants developed self-reliance and trust in themselves, which translated to self-confidence and self-esteem (Ilhan & Bardakçı, 2020; Knapen et al., 2005; Williams & French, 2011). Emilia described this when she explained how Atabey Outdoors prepared her for future outdoor activities,

“It helps me be more active. Like running and walking and climbing mountains. Made it easier to do them.”

Samantha shared her appreciation for practicing the skills prior to using them herself.
“I love all of the adventures we get to do, and it just makes me feel really happy when I get to explore around, and I really like when we get to practice stuff, so we are prepared for when we actually do it.”

When detailing how Atabey Outdoors has changed her view on being outdoors Linda explained,

“It shows me that there's a lot of things that you can do outdoors.”

By facilitating direct and indirect outdoor activities to young girls under 12, Atabey Outdoors introduced the participants to the outdoors at a prime time to capitalize on the opportunity to make a lasting positive relationship with the outdoors (Carrier & Stevenson, 2017). This process reduced the participants' anxiety, worry, and fear associated with the outdoors, which resulted in increased comfort and willingness to be in the outdoors. Similar results were noted in the study done by Ward & Hobbs (2006). When discussing how Atabey Outdoors helped Rosemary prepare for future outdoor activities she stated,

“It changed my view because I like coming outside more and exploring more things”

When asked how Atabey Outdoors has changed her views on being outside Samantha said,
“It makes me feel good about the outside and want to play outside more and be outside more.”

It is apparent that Atabey Outdoors adhered to Mutz & Müller’s (2016) framework of outdoor adventure programming, which when applied in tandem with Bandura’s self-efficacy theory and experiential education, provided their participants with a valuable opportunity to grow and strengthen their self-confidence, self-esteem, and comfort in the outdoors. While these findings provided Atabey Outdoors with valuable feedback regarding their programming, the positive impact of these results extends far greater than the organization itself.

Atabey Outdoors sought to create an environment where Black and Brown adolescent girls could find empowerment, community, and a sense of self. In doing so, Atabey Outdoors provided young girls with the self-confidence, self-esteem, and comfort in the outdoors that is required to dismantle the systemic racism that has encouraged a historic unwelcoming, and hostile environment for Black and Brown individuals in the outdoors. The results of this study not only supported the mission of Atabey Outdoors of encouraging social, emotional, physical, and mental growth, it amplified the voices and presence of Black and Brown girls that will close the current and historic ethnicity gap in the outdoors.
Limitations

While this study achieved its goal in answering its main question, it is not without its limitations. A limiting factor of this study was the small number of participants. Due to the small sample size, the amount of longitudinal data from the CRSES and SEQ-C was inadequate to provide population generalizations. Constraints on the duration of the data collection period also proved to be an obstacle for sustained data collection and provided a narrow window for participants to join. Participant attrition reduced the number of available data points as some participants took the initial survey and then did not engage with Atabey Outdoors during the data collection period. These data points were removed from the study as they were inadequate for the scope of this study. It should also be noted that during the focus groups, it proved difficult to keep the attention of some of the participants, which reduced the amount of provided responses. This study cannot rule out potential outside influences on survey responses and does not aim to provide a definitive causality between self-reported self-esteem, self-confidence, and comfort in the outdoors and participation in Atabey Outdoors. Instead, it aimed to highlight the impact that Atabey Outdoors has on self-reported self-esteem, self-confidence, and comfort in the outdoors.
Recommendations for Social Work

As part of the social work profession, it is an obligation to promote the dignity and worth of an individual and address social injustice. In this vein, it is crucial for social workers to support outdoor adventure as a means to strengthen self-confidence, self-esteem, and comfort in the outdoors for adolescents. In addition, social workers can accomplish this goal while also focusing their efforts on social injustice by providing a safe place for Black and Brown individuals to recreate outdoors. To provide professional and effective services, social workers need to be well-versed in cultural humility and competence. This will assist the social worker and the participants in identifying their own intersectionality and how it may influence their behavior in the outdoors.

In addition, it is vital that this style of research be continued on a larger scale. While the data collected from this study is insufficient to provide generalized population conclusions, it is not outside the reach of a future study to achieve this goal. Especially if multiple outdoor agencies that provide services to similar demographics were to join forces in their data collection. Social workers can provide a unique and supportive role in accomplishing this undertaking, to the benefit of our local, state, country, and global community.

Conclusion

In conclusion, there is evidence that engaging in the outdoor adventure programs facilitated by Atabey Outdoors increased the self-confidence, self-
esteem, and comfort in the outdoors of the participants that engaged in this study. This is supported by the results of the CRSES, SEQ-C, and focus groups. It appeared that a higher frequency of engagement in Atabey Outdoors yielded incremental increases to self-confidence and self-esteem. This study added to the collection of research that reverberates these findings. In evaluating the effectiveness of Atabey Outdoors, it is apparent that by providing young Black and Brown girls with outdoor adventure and physical activity, the benefits extended beyond the scope of this study and increase their representation in the outdoors.
APPENDIX A:

INSTITUTIONAL REVIEW BOARD APPROVAL
IRB #: IRB-FY2022-225
Title: IMPACT OF OUTDOOR ADVENTURE ON THE SELF-ESTEEM, SELF-CONFIDENCE, AND COMFORT LEVEL OF BLACK AND BROWN GIRLS
Creation Date: 2-7-2022
End Date: 5-23-2023
Status: Approved
Principal Investigator: Yawen Li
Review Board: CSUSB Main IRB
Sponsor:

Study History

<table>
<thead>
<tr>
<th>Submission Type</th>
<th>Initial</th>
<th>Review Type</th>
<th>Full</th>
<th>Decision</th>
<th>Approved</th>
</tr>
</thead>
</table>

Key Study Contacts

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathan Benham</td>
<td>Co-Principal Investigator</td>
<td><a href="mailto:nathan.benham6495@coyote.csusb.edu">nathan.benham6495@coyote.csusb.edu</a></td>
</tr>
<tr>
<td>Yawen Li</td>
<td>Principal Investigator</td>
<td><a href="mailto:Yawen.Li@csusb.edu">Yawen.Li@csusb.edu</a></td>
</tr>
<tr>
<td>Yawen Li</td>
<td>Primary Contact</td>
<td><a href="mailto:Yawen.Li@csusb.edu">Yawen.Li@csusb.edu</a></td>
</tr>
</tbody>
</table>
APPENDIX B:

CHILD ROSENBERG SELF-ESTEEM SCALE (CRSES)
**Instructions:** Mark (X) the box that you feel best answers the question.

<table>
<thead>
<tr>
<th></th>
<th>Very True</th>
<th>True</th>
<th>Not True</th>
<th>Definitely Not True</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am happy with myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes I think I’m no good at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are lots of good things about me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can do things as well as most other children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t have much to be proud of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel useless at times</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I’m as good as everyone else</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wish I cared about myself more</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often feel like a failure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel good about myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Wood et al., 2021)
APPENDIX C:

SELF-EFFICACY QUESTIONNAIRE FOR CHILDREN (SEQ-C)
<table>
<thead>
<tr>
<th>1= Not at all</th>
<th>5= Very well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How well can you express your opinions when other classmates disagree with you?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. How well do you succeed in cheering yourself up when an unpleasant event has happened?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. How well do you succeed in becoming calm again when you are very scared?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. How well can you become friends with other children?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. How well can you have a chat with an unfamiliar person?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td><strong>1= Not at all</strong></td>
<td><strong>5= Very well</strong></td>
</tr>
<tr>
<td>6. How well can you prevent to become nervous?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. How well can you work in harmony with your classmates?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. How well can you control your feelings?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. How well can you tell other children that they are doing something that you don’t like?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. How well can you give yourself a pep-talk when you feel low?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. How well can you tell a funny event to a group of children?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. How well can you tell a friend that you don’t feel well?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. How well do you succeed in staying friends with other children?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td><strong>1= Not at all</strong></td>
<td><strong>5= Very well</strong></td>
</tr>
<tr>
<td>14. How well do you succeed in suppressing unpleasant thoughts?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. How well do you succeed in preventing quarrels with other children?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. How well do you succeed in not worrying about things that might happen?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

(MURIS, 2001)
APPENDIX D:

INFORMED CONSENT
The study in which your child is asked to participate in is designed to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors. The study is being conducted by Nathan Benham, a graduate student, under the supervision of Dr. Yawen Li, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board at CSUSB. The Institutional Review Board can be reached at (909)-537-7588. This study’s identification number is IRB-FY2022-225.

**PURPOSE:** The purpose of the study is to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors for BIPOC girls aged 8-12.

**DESCRIPTION:** Participants aged 8-12 will be asked to complete a questionnaire prior to participation in Atabey Outdoors, as well as the same questionnaire after completion of every Atabey Outdoors program they attend. Participants will also attend a focus group to answer open-ended discussion questions to gauge the participants’ comfort in the outdoors and provide feedback on the program in general.

**PARTICIPATION:** Your child’s participation in the study is voluntary. Your child can refuse to participate in the study or discontinue their participation at any time without any consequences or exclusion from future Atabey Outdoors programs.

**CONFIDENTIALITY:** Your child’s responses will remain confidential, and data will be reported using pseudonyms. Identity will remain confidential outside of the Atabey Outdoors program.

**DURATION:** It will take 10-15 minutes to complete the questionnaires after each Atabey Outdoors program attended. If participating in focus groups, the expected durations is 20-30 minutes. There will be two focus groups during the Fall season.
**RISKS:** Although not anticipated, there may be some emotional discomfort in answering some of the questions. If your child feels discomfort while answering those questions, they can skip the question or end their participation.

**BENEFITS:** There is not any direct benefits to the participants. However, findings from the study will contribute to our knowledge in this area of research as well has provide Atabey Outdoors with valuable feedback to improve their program in the future.

**CONTACT:** If you or your child have any questions about this study, please feel free to contact Dr. Li at yawen.li@csusb.edu.

**RESULTS:** Results of the study can be obtained from the Pfau Library Scholar Works database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2023.

I understand that I am giving permission for my child to participate in your study, including participation in the focus groups. My child can also accept or decline participation in this study, at any time without consequence. I have read and understand the consent document and give permission for my child to participate in this study.

Signature: ____________________________ Date: ________________
APPENDIX E:

CHILD ASSENT FORM
My name is Nate Benham. I am trying to learn how Atabey Outdoors impacts self-esteem, self-confidence, and comfort in the outdoors because those are great character traits to strengthen. If you would like, you can be in my study.

If you decide you want to be in my study, you will fill out a simple questionnaire before your first Atabey Outdoors event and the same questionnaire a couple of times later, depending on how many events you attend. There is even the possibility to share your thoughts and feedback by answering open-ended questions in one of the offered focus groups.

There will be no foreseeable risks if you chose to participate, or not to participate. One benefit in participating is that the information collected will help Atabey Outdoors grow and get better at serving the community.

Even though I am collecting your name, your name will not be used in this study. When I tell other people about my research, I will not use your name.

Your parents or guardian have to say it’s OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don’t want to be in the study, no one will be mad at you. There are no negative consequences for not joining the study. Your participation in future Atabey Outdoors programs will not be impacted if you decide to not participate. If you want to be in the study now and change your mind later, that’s OK. You can stop at any time.

My telephone number is [redacted]. You can call me if you have questions about the study or if you decide you don’t want to be in the study anymore.

I will give you a copy of this form in case you want to ask questions later.

**Agreement**

I have decided to be in the study even though I know that I don’t have to do it. My questions have been answered and if I have more questions later, I know who to ask.

____________________________ ________________
Signature  &  Date
APPENDIX F:

FOCUS GROUP INFORMED CONSENT AND CHILD ASSENT FORM
INFORMED CONSENT

The study in which your child is asked to participate in is designed to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors. The study is being conducted by Nathan Benham, a graduate student, under the supervision of Dr. Yawen Li, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board at CSUSB. The Institutional Review Board can be reached at (909)-537-7588. This study’s identification number is IRB-FY2022-225.

PURPOSE: The purpose of the study is to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors for BIPOC girls aged 8-12.

DESCRIPTION: Participants aged 8-12 will be asked to participate in a focus group after engaging in Atabey Outdoors. During the focus group participants will be asked open-ended discussion questions to gauge the participants’ comfort in the outdoors and provide feedback on the program in general.

PARTICIPATION: Your child’s participation in the study is voluntary. Your child can refuse to participate in the study or discontinue their participation at any time without any consequences or exclusion from future Atabey Outdoors programs.

CONFIDENTIALITY: Your child’s responses to the open-ended questions will remain confidential outside of the focus group, and data will be reported using pseudonyms.

DURATION: The expected duration of the focus group is 20-30 minutes.

RISKS: Although not anticipated, there may be some emotional discomfort in answering some of the questions. If your child feels discomfort while answering those questions, they can skip the question or end their participation.

BENEFITS: There is not any direct benefits to the participants. However, findings from the study will contribute to our knowledge in this area of research as well.
has provide Atabey Outdoors with valuable feedback to improve their program in the future.

CONTACT: If you or your child have any questions about this study, please feel free to contact Dr. Li at yawen.li@csusb.edu.

RESULTS: Results of the study can be obtained from the Pfau Library Scholar Works database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2023.

I agree to have the focus group audio recorded: ____ YES ____ NO

I understand that I am giving permission for my child to participate in your study, including participation in the focus groups. My child can also accept or decline participation in this study, at any time without consequence. I have read and understand the consent document and give permission for my child to participate in this study.

Signature: _____________________________ Date: __________________

Assent Form

My name is Nate Benham. I am trying to learn how Atabey Outdoors impacts self-esteem, self-confidence, and comfort in the outdoors because those are great character traits to strengthen. If you would like, you can be in my study.

If you decide you want to be in my study, you can share your thoughts by joining a focus group. During the focus group you can provide feedback about the program and about yourself by answering open-ended questions.

There will be no foreseeable risks if you choose to participate, or not to participate. One benefit in participating is that the information collected will help Atabey Outdoors grow and get better at serving the community.

Even though I am collecting your name, your name will not be used in this study. When I tell other people about my research, I will not use your name.
Your parents or guardian have to say it’s OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don’t want to be in the study, no one will be mad at you. There are no negative consequences for not joining the study. Your participation in future Atabey Outdoors programs will not be impacted if you decide to not participate. If you want to be in the study now and change your mind later, that’s OK. You can stop at any time.

My telephone number is [REDACTED]. You can call me if you have questions about the study or if you decide you don’t want to be in the study anymore.

I will give you a copy of this form in case you want to ask questions later.

**Agreement**
I have decided to be in the study even though I know that I don’t have to do it. My questions have been answered and if I have more questions later, I know who to ask.

______________________________ ________________
Signature & Date
APPENDIX G:

ADDENDUM TO INFORMED CONSENT AND CHILD ASSENT FORM
INFORMED CONSENT Addendum

The study in which your child participated was designed to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors. The study was conducted by Nathan Benham, a graduate student, under the supervision of Dr. Yawen Li, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board at CSUSB. The Institutional Review Board can be reached at (909)-537-7588. This study’s identification number is IRB-FY2022-225.

PURPOSE: The purpose of the study was to examine the impact that participation in Atabey Outdoors has on an individual’s self-esteem, self-confidence, and comfort in the outdoors for BIPOC girls aged 8-12. This addendum of the Informed Consent agreement includes use of the organization’s name, Atabey Outdoors, in publication.

DESCRIPTION: Participants aged 8-12 were asked to participate in a combination of pre and post participation surveys and/or focus groups during 2022 Fall season.

CONFIDENTIALITY: Your child’s responses will remain confidential, and your child’s name will be reported using a pseudonym. Personal identity will remain confidential outside of the Atabey Outdoors program. The organization’s name, Atabey Outdoors, will be used in publication.

RISKS: While there are no foreseen risks of naming the organization’s name during publication, the organization will be formally named in publication.

BENEFITS: There is not any direct benefits to the participants. However, findings from the study will contribute to our knowledge in this area of research as well as provide Atabey Outdoors with valuable feedback to improve their program in the future.

CONTACT: If you or your child have any questions about this study, please feel free to contact Dr. Li at yawan.li@csusb.edu.

RESULTS: Results of the study can be obtained from the Pfau Library Scholar Works database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2023.

I understand that I am giving consent for the researcher to formally name the organization, Atabey Outdoors, in which my child attended, in publication. I acknowledge that my consent to this addendum is voluntary.

Signature: ___________________________ Date: ________________
Assent Form Addendum

My name is Nate Benham. I am learning how Atabey Outdoors impacts self-esteem, self-confidence, and comfort in the outdoors because those are great character traits to strengthen.

Previously, you decided to be in my study. You filled out simple questionnaires and/or participated in focus groups.

Even though I collected your name, your name will not be used in publication of this study. When I tell other people about my research, I will not use your name. The purpose of this addendum of the Assent form is to use the organizations name, Atabey Outdoors, in publication. Again, your name will not be used.

Your parents or guardian have to say it’s OK to formally name Atabey Outdoors, as well. After they decide, you get to choose if you agree or not.

If you don't agree, no one will be upset with you. There are no negative consequences. Your participation in future Atabey Outdoors programs will not be impacted.

My telephone number is [redacted]. You can call me if you have questions.

If you want, I can provide you with a copy of this form in case you want to ask questions later.

Agreement

I have decided to voluntarily agree to this addendum and acknowledge that the name Atabey Outdoors will be used in publication. My questions have been answered and if I have more questions later, I know who to ask.

______________________________ ________________
Signature & Date
APPENDIX H:

INSTITUTIONAL REVIEW BOARD MODIFICATION APPROVAL
**Modification**

IRB-FY2022-225 - IMPACT OF OUTDOOR ADVENTURE ON THE SELF-ESTEEM, SELF-CONFIDENCE, AND COMFORT LEVEL OF BLACK AND BROWN GIRLS

<table>
<thead>
<tr>
<th>Pt.</th>
<th>Reviewer</th>
<th>Reviewer Type</th>
<th>Current Analyst</th>
<th>Decision</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yane Li</td>
<td>Michael Gilfoyle</td>
<td>Review Board</td>
<td>CR2020-0426</td>
<td>Approved</td>
<td>Post-2018 Rule</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approvals</th>
<th>Task History</th>
<th>Letters</th>
<th>Attachments</th>
</tr>
</thead>
</table>

### Research Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Result</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yane Li</td>
<td>Principal Investigator</td>
<td>Certified</td>
<td>04-24-2023 9:20 PM</td>
</tr>
<tr>
<td>Nathan Benham</td>
<td>Co-Principal Investigator</td>
<td>Certified</td>
<td>04-24-2023 9:33 PM</td>
</tr>
</tbody>
</table>

69
REFERENCES


https://doi.org/10.3390/educsci10120363

https://doi.org/10.1080/14729679.2010.532986


https://www.census.gov/quickfacts/fact/table/phoenixcityarizona,US/PST045219


Williams, S. L., & French, D. P. (2011). What are the most effective intervention techniques for changing physical activity self-efficacy and physical activity behaviour - And are they the same? *Health Education Research, 26*(2), 308–322. https://doi.org/10.1093/her/cyr005

