

THE SUSTAINABILITY OF STUDY ABROAD: IMPACT ON STUDENTS'
ENVIRONMENTALISM AT THE FUNDACIÓN PARA LA CONSERVACIÓN DE LOS
ANDES TROPICALES STATION IN THE CHOCÓ RAINFOREST IN ECUADOR

AN HONORS THESIS
SUBMITTED ON THE 5 DAY OF MAY, 2023
TO THE DEPARTMENTS OF ENVIRONMENTAL STUDIES AND SOCIOLOGY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
OF THE HONORS PROGRAM
OF NEWCOMB-TULANE COLLEGE
TULANE UNIVERSITY
FOR THE DEGREE OF
BACHELOR OF ARTS
WITH HONORS IN ENVIRONMENTAL STUDIES AND SOCIOLOGY BY



OLIVIA DAVISON

APPROVED:

Amalia
Leguizamón

Digitally signed by
Amalia Leguizamón
Date: 2023.05.08
09:40:35 +02'00'

Amalia Leguizamón, Ph.D.

Co-Director of Thesis



Laura McKinney, Ph.D

Co-Director of Thesis



Casey Love, Ph.D

Third Reader

Liv Davison. The Sustainability of Study Abroad: Impact on Students' Environmentalism at the Fundación para la Conservación de los Andes Tropicales Station in the Choco Rainforest in Ecuador

(Professor Amalia Leguizamón, Sociology; Professor Laura McKinney,
Environmental Studies)

Abstract

Study abroad programs have become widely available and are encouraged for undergraduate students, especially in the environmental studies field. Students are given the opportunity to apply their classroom knowledge in an experiential and practical manner, learning new methods in environmental research and engaging with fellow students, professors, local and foreign researchers, and community members (Hale 2021). Many of the non-governmental organizations (NGOs) that work in collaboration with study abroad programs are embedded in countries and communities in the Global South. This study investigates how undergraduate students' environmentalism shifts (or not) after participating in one such study abroad experience, the Tulane Interdisciplinary Research and Action (TIERA) program. This study is centered on a small cohort-based group of undergraduate students, organized by professors in the School of Science and Engineering at Tulane University, with the goal of introducing students to community-engaged scholarship and the issues and solutions surrounding applied conservation. Created in 2021, the program works in conjunction with the Fundación para la Conservación de los Andes Tropicales (FCAT), a conservation NGO in the Chocó Rainforest in Ecuador. Data were collected in June and the fall (September-November) of 2022 using questionnaires, semi-structured interviews before and after the study abroad experience, and participant observation. Findings indicate that all TIERA students shifted towards community-centered

environmentalism when they were exposed to certain student experiences, including shadowing research projects and participating in collaborative workshops, that contextualized conservation projects in the Global South and placed local community members as “experts” in the field.

Despite these findings, many of the study abroad experiences in the TIERA program were founded upon the mainstream environmentalism of the Global North, causing confusion and disillusion in environmentalism. Understanding why some students were able to reframe their environmentalism, and what obstacles confined shifts in other students is key to understanding the role of study abroad programs in higher education.

Acknowledgements

This work would not have been possible without the support from the Environmental Studies and Sociology departments of Newcomb Tulane College and the Center for Global Education, who supported me as I pursued this research.

I am grateful to everyone who I have had the opportunity to work with during this and other related projects. I would like to thank professors Amalia Leguizamón, Laura McKinney, and Casey Love, the members of my Honors Thesis Committee, who have given me professional and personal support throughout this process and provided me invaluable lessons about sociological research and about life in general. As a young woman in academia, I feel extremely inspired by their accomplishments and character. The TIERA program organizers, including Professor Jordan Karubian, Megan Narasimhan, and Liat Perlin, allowed me to participate in this study abroad experience and made this research achievable. I cherish their expertise, open-mindedness, and compassion. I would also like to thank the FCAT team for their acceptance and willingness to share their knowledge. In addition, I want to express my gratitude towards the students who participated in this study, without whom none of this would have been possible.

Finally, I want to thank my family for their love and guidance. Through the ebbs and flows of life, they are the lighthouse guiding my way.

Table Of Contents

Introduction// 1

Outline// 5

Chapter One: Theoretical Framework and Literature Review// 9

1.1 Theories on Environmentalism// 11

1.2 Framing Environmentalism in a Broader Context//14

1.2.1 Emotions and Experiences//14

1.2.2 Framing of Environmentalism on a Global Scale//15

1.2.3 Influence of Social Structures//18

1.3 Environmentalism in the TIERA Program//22

1.3.1 Eco-Type Formulation and Categorization//22

1.3.2 Research Context/ /27

1.4 Discussion//31

Chapter Two: Research Method, Design, and Data Collection//32

Chapter Three: Investigating Students' Environmentalisms//35

3.1 Pre-Field Analysis//35

3.1.1 Student Introductions//35

3.1.2 Eco-Social Relationship Themes//38

3.1.4 Discussion//49

3.2 On-site Programming//50

3.2.1 "Expert" Presentations//52

3.2.2 Site Visits//56

3.2.3 Workshops and Discussions//61

3.2.4 Research Shadowing//65

3.2.5 Discussion and Takeaways from Students//66

3.3 Post-Field Analysis//66

3.3.1 Post-Field Analysis of Eco-Social Relationships//66

3.3.2 Post-Field Eco-Type Evaluation//73

Chapter Four: Limitations//76

Conclusion and Discussion//78

References//86

Appendices//93

Appendix A: TIERA Program Initial Questionnaire//93

Appendix B: Pre and Post-Field Interview Guides//95

List of Tables and Figures

37.....Figure 1: Student Code Sheet

Introduction

“I think [environmental protection] matters because we're people, and we care, and we want to preserve the environment so that we can live in it and enjoy it and share it with everything else that's alive on earth.” -Chloe

How and why do people relate to the environment, and how does this relationship impact their environmentalism? Across different countries, cultures, and social groups, people relate to the natural world through different avenues, including their personal connection to nature and the frameworks that influence that connection (Kennedy 2022). Some relate through physical engagement, whether it is participating in a beach cleanup or planting crops to support their family. Others relate via leisure activities, such as hiking or swimming. Many people show their environmentalism through their consumption habits, making an effort to “shop green” (Fraj 2007), or through their political action, including who they vote into office or through their support for government policy (Anderson 2011, Kenny 2019). People’s relationship with the natural environment is influenced by many internal and external factors.

Emotions and experiences effect people’s environmentalism (Kennedy 2022a, Kennedy 2022b). Emotions influence individual’s environmentalism by connecting experience in nature to specific feelings, which can impact a person’s concern about environmental issues or desire for deeper understanding. These experiences are influenced and contextualized by social characteristics, including cultural background, socioeconomic status, race, and gender (Norgaard 2011, Pellow 2018). Structural privilege and inequality impact how social groups relate to nature, determining if people have proximity and access to natural environments, and whether those experiences invoke positive or negative feelings. In addition, larger discourses relating to the perception of the natural world influence types of environmentalism, especially regarding the

macro-environmentalisms of the Global North versus the “environmentalism of the poor” (Guha 1997). Within “the environmentalism of the poor”, which includes countries in the Global South and environmental justice movements in the United States, communities impacted by environmental harm fight for survival and standard of living, defining their environmentalism as necessary and socially interconnected. In this framework of environmentalism, ecological issues are connected to human rights and distributive justice (Guha 1997). In the Global North environmentalism comes from ideas of preserving nature, both for its human benefit and its innate value as “pristine”, or the perception as untouched by humans (Taylor 2016). This type of relationship to nature places humans outside of the perceived web of life (Guha 1997). How people relate to the environment depends on their experience in the natural world and the predominant frameworks that influence their relationship, on a local and global scale.

These influences on environmentalism are not predetermined for a particular social group or country, instead they are created, reaffirmed, and contradicted by the social structures that people interact with every day (Čapek 2021, Schnaiberg 1994). Researchers describe how capitalist social structures, such as global economic markets as well as local and national governments, create discourse that determines what is considered a natural environment and how those natural environments will be used for consumption or preserved for conservation (Schnaiberg 1980). Social structures are controlled by powerful actors who, in many cases, benefit from environmental degradation and unequally distribute environmental harm across social groups and geographic regions (Schnaiberg 1994). Social structures include institutions at many levels, but for the purposes of this study, I will focus on higher education institutions and study abroad programs, social structures that have been tasked with helping to solve climate change issues by fostering environmental concern and intercultural competence amongst students (Behrnd 2015,

Caruana 2015, Hess 2018). Across universities and study abroad programs, especially those in the environmental education fields, stated goals of “sustainability” have been set that are designed to introduce students to environmental frameworks and relationships through formal education and experiential learning, resulting in the development of new environmentalisms (Lewis 2005, Stein 2019).

This paper investigates a study abroad program that shares the objectives described above, namely providing experiential learning, and developing intercultural competency in students within a conservation context (Office of Study Abroad). The TIERA program is a cohort-based study abroad experience operating through the School of Science and Engineering at Tulane University. Created and organized by ecology professors in 2021, the program works in collaboration with a nongovernmental organization (NGO) located in the Chocó Rainforest in Northwest Ecuador, the Fundación para la Conservación de los Andes Tropicales (FCAT). Through student experiences, including ecotourism site visits, discussions, and workshops with students and FCAT employees (FCATeros), “expert” presentations, and research shadowing, the program tries to achieve the stated goals of introducing students to community-engaged scholarship and the issues and solutions surrounding applied conservation (Office of Study Abroad). Community-engagement is defined as “the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of people” (CDC, 1997, page 9).

This research will define and describe environmentalism through Emily Kennedy’s theoretical framework of eco-social relationships. Expressed as “the intensity and direction of a person’s orientation toward the planet” (Kennedy 2022, page 6), an eco-social relationship can take many forms and is dynamic, changing along with our social and environmental context and

personal experience. Using a framework that connects the biophysical and the social, I can give a more holistic description of student's environmentalism. This research investigates if Tulane University undergraduate students' environmentalism shifts (or not) after participating in a study abroad experience at a conservation NGO in Ecuador. Because this study abroad program is operating from a largely ecological disciplinary background, it is important to analyze how this perspective might influence both student and professor environmentalisms.

Using a qualitative field work methodology, I examined students' eco-social relationships before studying abroad through a pre-departure questionnaire and semi-structured pre-field interviews, characterizing their environmentalisms into ideal eco-types. After engaging in participant observation with students during the two weeklong study abroad experience, I conducted post-field interviews when students returned to campus to gauge any shifts in environmentalism compared to their preliminary interviews. I collected feedback on the student experiences and the study abroad program in general, including how students perceived the specific activities and discussions, and whether the experiences reaffirmed or changed their pre-field environmentalism. Through these findings, I argue that students' environmentalism shifted toward community-centered relationship with the natural environment when they were exposed to certain student experiences, specifically research shadowing and workshop activities, that provided a practical representation of conservation projects in the context of the Global South. Students observed community-engaged scholarship in action that placed community members as "experts" in the field and highlighted their traditional ecological knowledge. Students were able to identify the distinct social aspects of environmental issues, and many felt a new sense of duty and inspiration to develop research projects and practices founded in community-engagement. However, I also argue that many aspects of the TIERA program reinforced the environmentalism

of the Global North and create confusion amongst students as they tried to understand what community-engaged scholarship and conservation entail. Students could identify the absence of community-engaged work and they expressed their reluctance to be complicit in unequal power dynamics, but they struggled to determine specific course of action that would lead to improved processes of community-engaged conservation and scholarship in study abroad.

The results of this research speak to many discourses in the study abroad and environmental sociology fields. The findings expand upon the current literature that defines and describes people's environmentalism and begins to understand how and why the eco-social relationships, or the foundation of environmentalism, develop and change given personal experiences in nature and broad frames of environmentalism. In the context of a study abroad program created at a higher institution in New Orleans, Louisiana, and carried out at a conservation research station in Esmeraldas, Ecuador, I consider how student's environmentalism is reaffirmed or contradicted and how that experience manifests itself in students' behaviors, emotions, and thought processes. I hope to provide key takeaways for the development of study abroad programs in the future, especially the TIERA program, and how it can actively analyze students' environmentalism during pre-departure activities and engage in more community-engaged experiences that will allow students to strengthen their eco-social relationships and gain intercultural competence that will persist in subsequent years.

Outline

In the following chapters I will introduce the theoretical concepts and methods I used to develop my argument, the specific context of my research, and my findings concerning students' environmentalism shift, or lack thereof. The movement of TIERA program students through the study abroad experience provided an ideal study group, and my participation within the program

allowed me to observe and engage with students during the experience and develop the relationships needed to gather high quality-data.

Chapter One will provide a theoretical framework for the research, discussing the literature in environmental sociology and study abroad that contextualized this study. I will discuss the ways that the natural environment and environmentalism have been defined and described, particularly in Emily Kennedy's book *Eco-Types: Five Ways of Caring about the Environment*. Then I will describe the framing of environmentalisms in the United States and in other countries, along with the social structures that affirm or contradict the different frameworks. Chapter Two will cover the research method, study design, and data collection techniques used for this specific research. Chapter Three will discuss students' environmentalism throughout the student abroad experience. This will include the first section explaining student's backgrounds and how these characteristics impact their relationship to nature. Many environmental frameworks, such as the environmental social justice movement, recognize the way that the intersection of characteristics impacts people's experience in the natural world, and therefore their environmentalism (Pellow 2018, Martínez 2002). Discussing socioeconomic, race, geographic location, and area of study will provide a better understanding of the cohort's makeup and give a baseline for understanding their eco-types. In the second section, student's eco-types will be discussed. The TIERA program recruited students for their knowledge and passion concerning the environment, for their diversity in areas of study, and for students who might not have the opportunity to study abroad for a longer term, including students in STEM majors, students of color, and students of lower socioeconomic status (Lewis 2005, Core 2017, Di Pietro 2022). Using Kennedy's conceptual framework, I will define and describe the eco-types I characterized TIERA students into: Northern Conservationist, Socially Concerned, and

Eco-Disengaged. I expand upon Kennedy's analysis of environmentalism to include a global framing of environmentalism by incorporating aspects of the environmentalism of the Global North and South (Guha 1997, Lewis 2021). In addition, I will show how these eco-types can change in undergraduate students after a short-term study abroad experience. Understanding what makes these eco-types distinctive will help explain how environmentalism can shift after experiencing a study abroad program.

The next section of Chapter Three will begin to discuss student experiences while studying abroad. Using mostly participant observation, I will describe the experiences, such as ecotourism visiting, research shadowing, workshops, and discussions, along with any other events that took place to give readers a better understanding of what students were doing each day while at FCAT. I analyze how student experiences fit into environmentalism frameworks and impact students' eco-social relationships. I will discuss student reactions, whether they were spoken about formally in discussions or informally during the student experience. Some students mentioned aspects of the trip in their interview that they found impactful, and I will begin to analyze how these events could impact students' environmentalism or eco-type.

The last section of Chapter Three will analyze the post field interviews. I will look at students whose environmentalism stayed the same, and why it did, as well as the students whose relationships changed, and the reasoning behind that change. I will also begin to identify specific characteristics, or eco-social relationships in the study group, that were most salient across students whose environmentalism changed. I will investigate why students were more likely to shift towards a Socially Concerned eco-type, and what specific student experiences encouraged a shift, along with the aspects of the study abroad program that hindered environmental shift.

Chapter Four will be a brief discussion about study abroad programs and their efficacy. After analyzing shifts in environmentalism, is the TIERA study abroad program an effective tool to help students inform their environmentalism? What aspects of study abroad did students point to as most beneficial? Study abroad is centered around what students can gain, what do communities gain from foreign visitors? I will discuss these questions and connect my findings back to environmental sociology and study abroad literature concerning environmentalism.

Chapter One: Theoretical Framework and Literature Review

This chapter provides the foundation and background for this research, connecting environmental sociology and global education literature to begin to understand the impact of a conservation-focused study abroad program on student's environmentalism. The first section will describe the theoretical framework found in Emily Kennedy's book, *Eco-types: Five Ways of Caring about the Environment*. Using Kennedy's understanding and description of eco-social relationships, I will categorize students' environmentalism into ideal eco-types. The concept of an ideal type comes from Max Weber's work *Economy and Society* where he formulates categories based on "hypothetical actors" to classify individual actors based on the most prominent qualities in that person (Swedberg 2018, Weber 2019). In Kennedy's book, she describes the ideal environmentalist and how these individuals are used as a "benchmark" for people to assess their own and others' relationships with the environment (Kennedy 2022). I formulated new eco-types that apply to study abroad students in the TIERA program, utilizing the defining characteristics of Kennedy's conceptual model for eco-social relationships: affinity, severity, efficacy, and morality. Further explanation of these eco-types is found in the third section of the chapter.

The second section will contextualize student's environmentalisms, or eco-types, within the framing of environmentalism in the United States, differentiating between the environmentalism of the Global North versus the "environmentalism of the poor". Ramachandra Guha describes the characteristics of each global environmental framework, including the prevailing perspectives and agendas, and analyzes how these frameworks impact people's relationship to the natural environment and what kinds of environmental action result from this relationship, most significantly in the United States and Latin American countries (Guha 1997).

Within these frameworks of environmentalism, social privilege, and inequality impact people's experiences in the nature, influencing the emotions individuals associate with the natural environment and the eco-social relationships they establish (Norgaard 2011, Pellow 2018). In global education, these frameworks often collide when study abroad programs operate in countries in the Global South, contending with differences in environmentalism and how they impact interactions between higher education institutions and their study abroad programs with collaborating organizations and communities (Ogden 2007, Doer 2021).

The next section will begin with a description of the eco-types used for classifying students in the TIERA program. Next, it will provide background information on the TIERA program, its affiliation with Tulane University, and its collaboration with FCAT. I will describe the creation and development of the program and how it fits within the context of other ecologically based study abroad programs. Then I will give a brief explanation of Tulane University and its history as a higher education institution and involvement with study abroad. Finally, I will discuss FCAT's history as a field station and reserve, including the stated goals and conservation actions of the organization. I will analyze how the different frameworks and agendas from each institution interacts with one another, creating communication networks and disseminating discourse about the natural environment. Contextualizing student's environmentalisms within specific social structures highlights how eco-social relationships develop and shift over time.

The final section will discuss the micro, meso, and macro levels of society where environmentalism is developed and framed for students in higher education and study abroad. The eco-types I propose, categorizing students in the TIERA program, consider the dynamic nature of environmentalism and use these conceptual frameworks to identify overarching themes

throughout students' eco-social relationships. The goal of this theoretical framework is to characterize environmentalism and to show how frameworks and structures disseminate environmental perspectives in society.

1.1 Theories on Environmentalism

Before defining and describing environmentalism, it is important to define the “environment” in the context of this study. Due to its use across many fields of study and social sectors, the word has come to mean whatever is immediately surrounding the individual, social group, or society in question (Schnaiberg 1980). Environmental sociologists recognize that this definition is vague and can refer to tangible environments, such as the buildings that make up a city, or intangible environments, such as the parties and lobbying groups that make up a political environment (Schnaiberg 1980, Sutton 2007). This research will focus on natural environments, a subset of the term. Schnaiberg defines “environment” as “the universe of biotic and other physical material as organized into dynamic ecological systems”, integrating living and nonliving elements (1980, page 9). The interpretation of this definition depends on how people insert themselves within ecological systems. Is the natural environment seen as a home for humankind, a resource to support human life, or a source of disaster from which people need to be protected?

Considering the definition above, environmentalism can be understood through human-environment-interactions, or how humans relate to the natural environment, influenced by their placement within it (Kempton 1999, Kennedy 2022a). Emily Kennedy's book, *Eco-types: Five Ways of Caring about the Environment*, understands this interaction through eco-social relationships; “the intensity and direction of a person's orientation toward the planet” (2022a,

page 6). To break this definition down, a person's environmentalism is identified by the strength of their relationship to whatever they perceive as the environment, and how they express that relationship. The strength of eco-social relationships is characterized by their level of affinity, or the emotional connection to the natural environment (Kennedy 2022a). Emotions play an important role in the development of an eco-social relationship. For example, if a person connects feelings of peacefulness and love to their relationship with nature, they are more likely to have a stronger affinity, influencing their eco-social relationship and characterizing their environmentalism.

Kennedy describes several characteristics in individuals that shape their perceptions of themselves and the environment, ultimately changing their level of affinity (2022a). The presence and level of these qualities within a person determines their eco-type, which I will describe comprehensively regarding students' eco-types in the TIERA program. The first quality that impacts eco-social relationships is a person's perception of the severity of ecological decline, which exists along a continuum with one side seeing the environment as resilient and humans as too weak to cause irrevocable damage and the other seeing the environment as fragile and humans as violent. Perceptions of severity can impact affinity in a variety of ways. Someone who lives in a rural area, where the natural environment is in their immediate surroundings, might have low severity levels, but still exhibit strong affinity, or connection to the natural environment. However, low levels of severity can also result in low affinity if a person is indifferent toward both the natural environment and environmental issues. High levels of severity can also have inverse effects; perceiving high levels of severity can bring forth feelings of responsibility and compel individuals to become more involved with solving environmental issues, increasing affinity. However, it can also bring forth feelings of hopelessness, which can

result in a detachment from environmental conscientiousness and a decrease in affinity (Kennedy 20022a). In the context of this study, students in the TIERA program all exhibited relatively high levels of severity, meaning they perceived environmental harm as prevalent and generally caused by human action and inaction.

The next two qualities are related to a person's perception of themselves as it relates to the natural environment, and what behaviors they exhibit due to this personal perception (Kennedy 2022a). Morality is the personal responsibility someone feels about their obligation in relation to the environment. Depending on an individual's perception of severity, they might feel individual accountability for environmental issues and a need to protect the environment. According to Kennedy, this quality is influenced by a person's understanding of what causes environmental issues, and which social actors are to blame. For example, a person who perceives environmental problems as a consumer issue might feel higher levels of morality, or personal responsibility, because they believe personal actions are in direct relation to environmental harm, whereas a person who places blame on corporations and governments might feel less morally responsible because they do not believe their actions will have a direct impact of the environment. The final quality Kennedy describes is efficacy, which she defines as "the extent to which people feel capable of actualizing their ideal relationship with the environment," (2022a, page 13). For some, a relationship with the environment, whether it be through protection, leisure, or stewardship, relates to feelings of confidence, or high levels of efficacy, because they have a sense of control over their thoughts and actions in relationship to the natural environment. Other people with low levels of efficacy exhibit feelings of powerlessness over their own actions in relation to environmental protection. Similar to morality, people's perception of personal efficacy is influenced by their understanding of the main causes of environmental harm,

individual or institutional actions. Many people with low levels of efficacy express emotions of guilt or defeat because they feel don't feel capable of protecting the environment, which can lead to detachment from a relationship with the environment (Kennedy 2022a). Within the TIERA program, one student exhibited low levels of efficacy during pre-field interviews, affecting her eco-social relationship.

Kennedy writes that eco-social relationships are developed within social contexts, cultural backgrounds, and physical surroundings, making them dynamic and relational (Kennedy 2022). The next section will discuss how personal experiences, cultural frameworks, and social structures influence environmentalism through the perceptions of nature, the agendas of mainstream environmental movements, and the everyday interaction with the natural world. Conceptualizing environmentalism formation will provide a clearer understanding of how students' eco-social relationships, or their environmentalisms, develop throughout their lives, and what kind of impact a study abroad program can have on that development.

1.2 Framing Environmentalism in a Broader Context

Student's eco-social relationships are impacted by their emotions and experiences in relation the natural world, the larger discourses about the natural environment that influence their view, and the social structures that they interact with and are a part of on the local and global scale.

1.2.1 Emotions and Experiences

The characterization of personal identity and social perception can impact the ways people build relationships with the natural environment and with one another. David Pellow describes this interaction in his book *What is Critical Environmental Justice?* where he identifies that ways that inequality presents itself within social and ecological systems and influences how certain social groups relate to the natural environment (2018). People's environmentalism is

influenced by many variables, including their nationality, socioeconomic status, and education level (Kennedy 2022). Certain social groups, such as people of color, people with a low income, or disabled individuals face many forms of oppression, and this oppression can include environmental harm or exclusion from natural spaces. Their experiences in the natural environment are more likely to be defined by negative feelings of uncertainty or fear because their immediate surroundings might contain harmful pollutants, the result of intentional placement of power plants, waste sites or other pollutant producing facilities (Pellow 2018). In addition, many of these marginalized communities have had their land taken from them or destroyed by corporate and governmental action. These experiences can impact environmentalism in many ways. For some, it may produce a concern about the natural environment that is based in first-hand experience of environmental issues, for others it may cause feelings of disconnectedness. Emotions influence individual's environmentalism by connecting experience in nature to specific feelings, which can impact a person's concern about environmental issues or desire for deeper understanding (Norgaard 2011). Before students engage in cultural learning, understanding their how their experiences in nature, and the emotions that develop along with those experiences, impact their perception of the natural environment will allow them to better understand their environmentalism and its development within existing power dynamics. In a study abroad context, analyzing their own pre-conceived relationship with the environment before travelling will allow students to view their eco-social relationship as socially constructed and changeable. For students to truly experience study abroad through a community-engaged lens, they must be open to the unknown and willing to feel uncomfortable in a different culture (Ogden 2008).

1.2.2 Framing of Environmentalism on a Global Scale

Although an individual's environmentalism can be influenced by their personal experience in nature, there are larger discourses that frame environmentalism on a global scale. In Ramachandra Guha's book *Varieties of Environmentalism: Essays North and South* the author describes how the "environmentalism of the poor" contrasts with environmental frameworks in the Global North (Guha 1997). This literature speaks to Kennedy's understanding of eco-types by analyzing the larger environmental discourses in society that can have an impact on how people view the natural environment, and therefore affect their eco-social relationships. By defining and explaining these environmentalism frameworks, I contextualize the specific eco-types I found in this study abroad program.

Guha writes that the environmentalism of the North, especially the mainstream movements, are contextualized by post-industrial society, or a society that mass produces high tech services and mass consumers the goods and manufacturing produced in developing countries (1997). Many people have the opportunity to travel to "wild" places and participate in activities of leisure, creating a source for popular support for environmental protection, but also distancing themselves from the environment. In the Global North, traditional environmental movements are largely bureaucratic, and they rely on fundraising and lobbying to create incremental change. Out of this indirect action grew more radical environmental groups, such as environmental justice and ecofeminism, which ascribe to the "environmentalism of the poor", or the environmentalism more prevalent in the Global South (Lewis 2021). This variety of environmentalism was created in reaction to nature-based conflicts, such as the hazardous waste disposal in a community of color. It is communities fighting against destructive processes of development and governance that cause environmental degradation and jeopardize lives. The environmentalism of the poor is critical of unsustainable development and the endless

consumption of the Global North and works towards a goal of living in harmony with nature (Guha 1997).

Community-engagement is a conceptual framework, influenced by the “environmentalism of the poor” framework. This research uses the definition of community-engagement as “the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of people” (CDC, 1997, page 9). It can take on many forms and partners in community-engagement can include organized groups, agencies, institutions, or individuals. This framework connects environmental and social solutions with the goal of improving the standard of living for the ecosystem, including humans (McCloskey 2013). The overarching goals of community-engagement include building trust amongst partners, enlisting new resources, facilitating quality communication, and improving overall well-being as individual projects become lasting partnerships between groups (McCloskey 2013). Most, if not all, of these characteristics should be met if an organization defines themselves as community-engaged. Within the TIERA program, these goals have not been reached for the most part. As the study abroad program evolves, it can incorporate these characteristics into student experiences.

Both the environmentalism of the North and the “environmentalism of the poor” are social response to political or governmental inaction toward the destruction of nature and nearby at the at risk communities (Guha 1997) However, they differ in ideology, with the environmentalism of the poor, in both the Global South and in grassroots environmental justice movements, focused on the links between ecological harm and human rights issues and founded in grassroots collective action against “uncontrolled economic development” (Guha 1997, page 18). The environmentalism in the North is more concerned with attitudes towards the natural

environment, imploring people to go into the “wild” and interact with other organisms to build relationships, but not recognizing the ways that consumer culture is in direct conflict with those very organisms and ecosystems, both in the countries of the Global North and on a global scale (Guha 1997).

This environmental framework highlights the different environmentalism students might observe and experience, especially if they study abroad in a country in the Global South. Kennedy’s research helps us understand how people’s relationships with the environment, and Guha’s analysis of environmentalism shows us one way that the relationship can be contextualized in a broader discourse. In the higher education and study abroad context of this study, these environmental frameworks are both contradicted and reaffirmed, sending students mixed messaging about community-engagement and what it means.

1.2.3 Influence of Social Structures

Social structures contextualize the experiences and discourses described above, reproducing environmental perceptions and agendas in the institutions people are affiliated or interact with throughout their lives (Čapek 2021, Schnaiberg 1994). For the purposes of this study, environmentalism discourses disseminate into higher education and study abroad programs, shaping the ways social actors relate to the natural environment. In the past decade, both social structures have directed their attention towards issues of climate change, focused on developing environmental concern and intercultural competence amongst students (Behrnd 2015, Caruana 2015, Hess 2018). In the United States particularly, universities have developed environmental objectives, using sustainability buzzwords such as “climate conscious” that incorporate formal education and experiential learning (Lewis 2005, Stein 2019).

Higher education has been characterized by a colonialist past and neoliberal present, impacting the environmentalisms that are reaffirmed inside of its structure (Suspitsyna 2021). Historically, higher education institutions were founded upon the ideas of European superiority, in terms of both knowledge and culture, allowing predominantly white male social actors to effectively erase the knowledge and lived experience of other social groups, such as the Native Americans. The implications of this system persist today, as the composition of professors and administrative staff, especially within the “hard science” fields, such as engineering or biology, are mostly white individuals (Suspitsyna 2021). In the modern times of neoliberal capitalism, universities uphold the superiority of white culture in their educational policies and practices. Many higher education institutions prioritize endowment over education, which disenfranchises certain social groups, such as students of color, women, and indigenous students, who are effectively barred from higher education institutions, apart from diversity campaigns and college athletics that exploit students and maintaining market-driven policy (Kidman 2020).

In recent years, higher education institutions have come to recognize their structural inequality, upholding the environmentalism of the Global North through their separation of nature and human systems in an academic setting and viewing nature as a place to visit and then leave. Study abroad programs have begun to adapt to work with a different environmental framework, but powerful actors within higher education are confronted with their role in upholding unequal power dynamics and colonial practices (Suspitsyna 2021).

Study abroad programs organized by higher education institutions have become widely available and are encouraged for undergraduate studies and are especially prevalent in environmental programs (Hale 2021). Global learning can provide an opportunity to apply theoretical studies and intellectual curiosity in a more practical manner through experiential

learning, which creates cultural bridges through new relationships. In addition, students can undertake large-scale research alongside fellow students, professors, researchers, and community members. Studies have shown that study abroad programs can improve students' topical knowledge, language skills, and intercultural competencies, just to name a few (Dwyer 2004, Lewis 2005). All these experiences have the capacity to impact a student's environmentalism, shifting the way that they consider and relate to their surroundings, both socially and ecologically. However, it is important to consider the history of study abroad and understand the drawbacks to global learning if not executed properly.

Study abroad, especially originating in the Global North, has its roots in a history of early colonial travelers, who traveled to foreign countries, free to experience the culture and natural surroundings from a "safe" distance and impose their status as an elite (Jones, 2019, Ogden 2008). When researchers, specifically sociologists and anthropologists, began to enter local communities in an effort to learn about new cultures and create intercultural relationships, new forms of harm arose in the form of eco imperialism. As an analytical concept, eco imperialism describes environmental governances that "constrain participation in societal decision making, or that cause social and even ecological harm under the guise of environmental protection" (Dyer 2011, page 188). Many social structures can be complicit in eco imperialism, including local and national governments as well as NGOS. In the context of study abroad within the environmental field, programs from the Global North can deliberately or inadvertently impose environmental ideas onto local populations if they do not engage in cultural competency practices, such as predeparture activities, or community-engaged scholarship (Ogden 2008, Ogden 2021). Today, study abroad opportunities have increased in size and variety (Di Pietro 2022), but programs face the danger of falling back into colonial discourse (Jones 2019). Many study abroad programs are

becoming profit seeking businesses, with students as the customer, and they seek to find a balance between providing accommodations that meet student expectations while still providing learning through intercultural engagement. Study abroad programs often tout community engagement as a key aspect of the program, but delivering on this goal can be difficult as student accommodations and experiences become more focused on student comfort, needs and expectations and less on cultural exchange (Ogden 2008). For example, when students live with majority English speakers during study abroad experiences, this can create a “buffer zone”, allowing them to distance themselves from local community members stay comfortable in a setting that is demographically and linguistically similar.

Historically, colonialism involved groups of foreigners travelling to new areas, living there for a period, and maintaining allegiance to a home country (Ogden 2008). Following this description, study abroad programs are based on colonial practices, following similar procedures. Breaking away from this paradigm will require program administrators, NGO collaborators, and university sponsors to make intercultural learning impossible for students to avoid (Ogden 2008). Students should not be expected to achieve the bare minimum of observing local community efforts, they should be pushed to listen to and engage with community actors and create long term relationships. In addition, students should reframe their expectations for study abroad experiences, viewing them as an opportunity to have an immersive experience in a culture, rather than an excuse to be a voyeur of a community (Ogden 2008). Pre-departure activities and discussions are essential to guide students toward meaningful global learning. Finally, colonial discourse is predicated upon the centralizing of foreign visitors as the “elite” (Ogden 2021, Behrnd 2021). Therefore, for study abroad programs to escape this paradigm, local communities’

needs should be at the forefront of programming, and community members must be primary actors and leaders in study abroad collaborations.

The dynamics found in higher education and study abroad typify the framing of environmentalism across different social groups, communities, and nations. In the United States, these social structures reaffirm the environmentalism of the Global North in their processes and organization structure. Study abroad programs that are created within these frameworks and social structures face an uphill battle against engrained eco-social relationships that create barriers to reaching community-engaged scholarship. The next section will provide examples of these barriers, and examples of how study abroad programs are breaking away from the mainstream environmentalism in the Global North.

1.3 Environmentalism in the TIERA Program

1.3.1 Eco-Type Formulation and Categorization

The qualities described above, along with the framing structures they are contextualized within, have direct impacts on people's affinity toward the environment, which defines eco-social relationships. In her book, Kennedy uses the conceptual model of ideal types to categorize her study group participants into eco-types depending on levels of affinity, severity, morality, and efficacy. The concept of an ideal type comes from ideas formulated and developed by Max Weber and other sociologists to categorize study group participants based on overarching characteristics and "hypothetical actors" (Swedberg 2018, Weber 2019). Kennedy employs this concept, developing the "ideal environmentalist" and using this categorization as a tool to assess people's relationships with the environment (Kennedy 2022). Her research resulted in five eco-types with varying levels of affinity and other eco-social qualities, with her ideal

environmentalist called the Eco-Engaged eco-type. This eco-type is characterized by high levels of affinity, severity, morality, and efficacy. Kennedy's eco-types were developed to account for individuals who are not usually understood as environmentalists, but still possess affinity for the environment (Kennedy 2022a). For example, a farmer in the rural Midwest might not have high levels of severity, or perception of ecological decline, but can still have high levels of affinity because of an everyday interaction with the natural world. However, these eco-types do not apply to the study abroad students in the TIERA program. All the participants chose to take part in a study abroad experience centered around biological conservation, and a majority come from academic fields related to the natural environment. These characteristics placed most students in Kennedy's Eco-Engaged eco-type, with high levels of affinity, or emotional connection to nature, and controlled for placement in any other eco-type. Employing a similar conceptual framework, I created eco-types to categorize students in the TIERA program, measuring their eco-social relationships based on qualities of affinity, severity, morality, and efficacy.

Considering my data and findings, the eco-types I developed are the Northern Conservationist, the Socially Concerned, and the Eco-Disengaged. These eco-types consider personal eco-social relationships as well as the larger structures that frame environmentalism within certain contexts.

The Northern Conservationist has high levels of affinity, feeling deeply connected to the natural world. This relationship usually manifests itself in feelings of protection and curiosity. They exhibit high levels of severity, perceiving environmental problems as the most important global issue. In this eco-type, individuals view environmental issues and social issues as separate, and tend to imagine the natural environment as void of humans. In terms of morality, individuals with a Northern Conservationist eco-type feel a personal responsibility toward conserving the natural environment and mitigating climate issues. In many cases, they mention

consumer habits and education as areas where they can implement their personal responsibility. They tend to focus on individual action when describing environmental solutions, and are less likely to mention institutions, such as corporations or governments, as social actors. When it comes to levels of efficacy, people in this eco-type feel very capable of accomplishing their ideal environmental relationship, usually through their experience in a self-defined “wildness” or through their academic trajectories in the environmental field. This eco-type is framed by the perspectives and agendas of the Global North environmentalism. Namely, individuals in this eco-type view themselves as outside of nature, as a protector or an investigator (Guha 1997). For the Northern Conservationist, the environment is a place to visit, and should be kept “pristine” for human benefit and for its innate value (Taylor 2016). In the context of the TIERA program, students in this eco-type were more likely to express the sentiment of “science for the sake of science”. In discussions about environmental solutions, Northern Conservationist students felt their role was to develop scientific research that would aid in conservation efforts, to “shop green” and ascribe to “sustainable” consumption habits, and to educate themselves and others about environmental issues to promote environmental awareness.

The Socially Concerned eco-type has similar levels of affinity, but their emotions and experiences in relation to the environment manifest differently than people in the Northern Conservationist eco-type. For example, individuals in this eco-type tend to view themselves as a part of environmental systems, a relationship that is characterized by feelings of kinship. The level of severity in this eco-type is high, and individuals expressed worry about a variety of environmental problems, especially climate change. However, their definition of an environmental issue differed from the Northern-Conservationist eco-type, aligning with frameworks of the “environmentalism of the poor”. The Socially Concerned individual is more

likely to recognize social issues in an environmental context, understanding the complex interconnectedness of social structures and nature (Guha 1997, Lewis 2021). For this reason, individuals in the Socially Concerned eco-type were more likely to mention the social dynamics of environmental issues. In the context of the TIERA program, Socially Concerned students expressed more concern about the communities living within and surrounding conservation areas. Individuals in this eco-type exhibited high levels of morality, meaning they felt a personal responsibility to protect the environment, and advocate for communities who are most affected by environmental issues. They were more likely to recognize social structures, such as transnational corporations and governmental bodies, as the main actors in environmental harm, but they still felt a responsibility to hold those systems accountable for their actions. In terms of efficacy, the Socially Concerned eco-type has slightly lower levels of overall, meaning they feel less capable of achieving an ideal relationship with the natural environment. Their recognition of social structures as the cause of environmental harm causes individuals in this eco-type to question individual actions, such as consumer habits, as an adequate solution to environmental issues. They are also more likely to question scientific efforts as environmental solutions because they recognize the impact of conservation projects on local communities. Socially Concerned people are more likely to suggest community-engaged initiatives to mitigate climate change, emphasizing the need to listen to communities and identify social structures that reinforce both social and environmental harm. Socially Concerned students in the TIERA program expressed more feelings of uncertainty towards FCAT's organizational structure and conservation practices as they dealt with the conflicting frameworks of environmentalism at the research station.

The final eco-type is the Eco-Disengaged, a group that has lower levels of affinity than the other eco-types. Individuals in this category have mixed emotions towards the natural

environment, with some experiences characterized as pleasurable and others characterized as uncomfortable. Eco-Disengaged individuals have high levels of severity, but not as high as The Northern Conservationist or the Socially Concerned eco-types. Although they recognize many environmental issues as serious, people in this eco-type are not as aware of the complexities of environmental problems because they do not spend as much time preoccupied with the subject. In many cases, they prioritize other issues that they perceive as impacting them directly, such as racial discrimination or sexism. They might recognize the interconnectedness of these issues and environmental problems, but they express feelings of hopelessness towards environmental issues, such as climate change, causing them to disengage from the natural environment and focus on the social sector. In terms of efficacy, individuals in this eco-type feel more confident in their ability to solve social problems rather than facing the complexity of the natural environmental. The Eco-Disengaged eco-type has lower levels of morality, or personal responsibility toward the natural environmental. Individuals in this category recognize how social structures reinforce harmful systems, impacting the social groups they are focused on. They speculate that these social structures also effect the natural environment, adding to feelings of hopelessness and leading to further disconnection from environmental issues. Within the TIERA program, there was one student who fit this eco-type. I will discuss her environmentalism comprehensively below but is important to note that she expressed conflicting sentiments while discussing her relationship with the natural environment. She described feelings of closeness and enjoyment to nature during her childhood, but also defined some of her experiences in nature as discomfoting. These conflicting experiences, compounded with the separation of social and environmental issues and the prioritization of these “non-environmental” issues resulted in an Eco-Disengaged eco-type.

These eco-types categorized students within the TIERA program, allowing for an initial evaluation of their eco-social relationships. The stated goal of most environmentally based study abroad programs in the United States, including the TIERA program, is to foster intercultural competency and introduce students to different types of environmentalism. Meeting this goal would mean students move from a Northern Conservationist or Eco-Disengaged eco-type towards a Socially Concerned eco-type. I argue that certain aspects of study abroad shift students' environmentalism towards a Socially Concerned eco-type while others uphold a Northern Conservationist eco-type.

1.3.2 Research Context

The specific context of this research and application of conceptual frameworks occurred within The Tulane Interdisciplinary Research and Action (TIERA) program. This study abroad opportunity operates out of the School of Science and Engineering at Tulane University and is promoted by the Center for Global Education at the university. Created by an ecology professor, the program works in collaboration with an NGO, called the Fundación para la Conservación de los Andes Tropicales (FCAT). This is a cohort-based group made up of students with varying interests and majors, including biology, environmental studies, and public health. This initial cohort had full funding, including travel and accommodation cost, allowing for program organizers and professors to recruit a wider variety of students to participate. In the first year, students travelled to the Esmeraldas province in Northwest Ecuador to stay at the NGO research station located in the Chocó Rainforest. The research station and reserve are privately owned, but they operate within a nationally protected area, the Mache Chindul reserve. During their initial visit, the TIERA cohort, participated in several student experiences to observe field research as well as interact with local residents. While at the station, they participated in workshops and

frequent discussions concerning ethical community engagement, local conservation efforts, and the history of deforestation in the Choco Rainforest. This program was created in the spring and summer of 2022, and its goal is to allow students to return to the station in the following years to develop research projects or pursue community engagement work.

As mentioned above, the TIERA program collaborates with an organization in Ecuador, called FCAT. As an NGO focused on biodiversity conservation, FCAT's stated goals include an expansion of community-led reforestation, research, and habitat protection programs to show how empowering local communities can reverse tropical reforestation (Perlin, 3/9/23). The organization was created by an ecology professor at Tulane University, in collaboration with graduate students and community members in Ecuador. Beginning in 2021, the NGO has collaborated with more students and professors from different fields of study, such as sociology and anthropology, to gain more economic and social information and improve community engagement efforts. The station is in the Chocó Rainforest, an area that is coveted as a biological hotspot by researchers but is also fragmented by agricultural land (Browne 2016), making it a "nontraditional" conservation site where community-based approaches are both necessary and favorable (Laurance 2011, Takeuchi 2017).

Analyzing FCAT's organizational makeup based on the definition and characteristics of community-engagement provided by McCloskey, the NGO can be described as a community-engaged organization that is still working toward goals of building trust, enlisting new resources, facilitating quality communication, and improving overall well-being (2013). The majority of their staff, also known as FCATeros, come from local communities, and of the eleven team members listed on their website, eight are Ecuadorian, and four live within the Mache Chindul reserve (*FCAT Ecuador*). As an organization, FCAT has existed in the area since 2018, and

during that time they have created and executed several community outreach programs, with their latest initiative providing young people with the opportunity to learn about conservation and receive training in environmental theories and methods (FCAT). This shows collaboration between FCAT and community members, allowing them to begin to build trust. In terms of community-engaged scholarship, across most of the research that occurs at the station, FCATeros are directly involved with the design and execution processes, working with students, professors, and researchers from universities in the United States and in Ecuador. Projects have different levels of collaboration, and there are published works that come out of research at FCAT that lists FCATeros as coauthors. Concerning FCAT's conservation efforts, they seem to be pursuing community-based approaches, but they still employ aspects of "traditional" conservation of the Global North by employing preservation tactics focused on protecting biodiversity. They are employing a two-phase project to achieve net forest gain over the next seven years: (1) purchasing strategic pieces of land for forest preservation and restoration in order to connect ecological hotspots; along with (2) developing relationships with stakeholders in the area to collaborate on socioeconomic initiatives.

FCAT exists within a national reserve called the Mache Chindul reserve. Based on the presentation by the Ecuadorian Ministry of the Environment and the testimonies of community members, before the Mache-Chindul reserve was created by the Ecuadorian government, smallholder farmers migrated from a nearby province, Manabí, to Esmeraldas in the 1960s because of drought due to deforestation. In 1964, the government incentivized farmers to move into a sparsely populated area via a land reform law called Instituto Ecuatoriano de Reforma Agraria y Colonización (IERAC). This act required landholders to create "usable" land, and farmers began to clear land for cacao and cattle. The land was not officially sold to people but

was granted to them if they worked the land for three years. If they did not, they would be removed from the property and replaced. Although there were other families living within the area, the agriculture was not as developed as Manibí, and the introduction of a hybrid form of cacao that required full sunlight to grow created a sharp increase in deforestation. A decade later, the area was deemed a reserve, and farmers were told they could not cut down any more trees (Goodwin 2016). This caused a rift between community members and the government for many reasons. The government created the reserve mostly to protect watersheds and did not consider or inform communities before creating the Mache-Chindul, cutting off most resident's main source of income. Also, many people within the land do not technically own their land, and only have possessory rights, given to them during the time period of IERAC (Goodwin 2016). This means the government could potentially take land from farm owners in the name of conservation. In general, community members expressed a general distrust towards the government because they have not been compensated for their loss of income and they feel they were not adequately warned about the reserve.

Within the larger conceptual framework of community-engaged scholarship lies community-engaged conservation, which can include protection and restoration of biodiversity, environmental stewardship of the land, and community outreach initiatives among other strategies and actions (Alexander 2016). This form of conservation differs from the traditional wilderness preservationist of the Global North, such as the National Parks System, which focuses on keeping humans separated from nature in predominantly rural areas of the United States (Harrison 2021). Instead, community-engaged conservation can occur in diverse ecosystems with complex contexts, such as areas with a mixture of uninhabited and residential/agricultural land. Many ecosystems in Latin America and the Global South, including the Chocó Rainforest, are

characterized by high biodiversity and a wide variety of topographies, such as a fragmented forest (Browne 2016). CEC also recognizes historical land practices and emphasizes local ecology and culture to achieve coexistence of human systems within the natural environment as much as possible (Alexander 2016). For this methodology to work, actors, such as NGOs, should recognize the interdependence between humans and nature (Harrison 2021, Lewis 2021), and find avenues of balance along a continuum that at one end is complete preservation and at the other end is environmental degradation.

1.4 Discussion

The processes that influence students' eco-social relationships operate within social groups, cultures, and on a global scale. This is how I define and study environmentalism in TIERA program students. Eco-social relationships are dynamic and influenced by emotions, experiences, discourses, and social structures. These environmental relationships can be categorized into ideal types, or eco-types, labeled Northern Conservationist, Socially Just, and Eco-Disengaged. I hope to show that an eco-social relationship, and therefore an eco-type categorization, is changeable in students when they have a study abroad experience. I also discuss the barriers that keep students from shifting eco-types.

Chapter Two: Research Method, Design, and Data Collection

Data collection for this research occurred over a five-month period, non-consecutively, from May 2022 to November 2022. The data was gathered in New Orleans, Louisiana, and at the FCAT station in Esmeraldas, Ecuador. The sample group was made up of six undergraduate and graduate students, who range in age from nineteen to twenty-one and who participated in a study abroad program in June 2022. This sample group was defined as students who participated in the student experiences while at the FCAT station over the course of ten days. This sample group was chosen because of the ability to maintain research continuity throughout their experience, which involved each student responding to a 25-question pre-departure questionnaire (survey in Appendix A) and participating in a 65-question pre-field semi-structured interview along with a 30-question post-field semi-structured interview (interview guides in Appendix B).

I analyzed students' environmentalism shift (or lack thereof) using the qualitative field research data collection tools listed above. The questionnaire was a document containing questions and other items, such as statements to respond to, that provided information about students (Babbie 2014). Students responded to the questionnaire in May and June of 2022, before arriving at the FCAT field station. It had qualitative, abstract questions for participants to answer freely, along with demographic questions that provided quantifiable data, such as students' age. The interviews, conducting in June and in the fall (September to November) of 2022, were conversations between myself and the study abroad participants. The interview guides had a general plan of inquiry, including guiding topics, but questions were not asked in a particular order, and many times further inquiry led to unplanned questions, defining them as semi-structured (Babbie 2014). Using predominantly qualitative data collection tools in the form of semi structured interviews, along with some quantitative questions regarding student

demographics allowed for a better understanding of variety across students' backgrounds and depth within students' experience. In addition, I employed participant observation for ten days in June of 2022, taking part in study abroad experiences and observing students interacting informally with one another and the natural environment during the student activities, site visits, and discussions that took place. Sociology scholars recognize that participant observation can take on many forms, existing on a continuum between complete participant (where participants are not aware of the researcher's observation) and complete observer (where the researcher does not engage in any of the social processes with participants) (Babbie 2014). In this case, I participated fully with participants, but I informed them of my research for both ethical and practical reasons. Ethically, I wanted study abroad participants to know my true intentions in participating, and practically, I wanted participants to feel comfortable sharing their emotions and experiences with me throughout the trip during informal conversations and semi-structured interviews.

The questionnaire design was developed with the help of another undergraduate student, Laia LaRue, who was also conducting qualitative field research. We consolidated our questions into one document, covering demographic information, students' initial emotions in lieu of their study abroad experience, and their perceptions of personal environmentalisms along with their perceptions of the communities surrounding the FCAT station. The design of the semi-structured interview guides was backed by similar studies of people's environmentalism, such as Dorceta Taylor's study on the thoughts and emotions college students have toward nature (2019), and Emily Kennedy's book on the various eco-types, or ways people relate for the environment (2022). With the help of a sociology professor and the program coordinator of the TIERA program, I developed interview guides that prompted students to discuss their perception of

nature and their experiences in the natural environment before, during, and after the study abroad experience, allowing me to analyze changes in emotions and environmentalisms as well as identifying aspects of the TIERA program that impacted participants.

Qualitative field research has many advantages, including its ability to collect a variety of findings due to fluidity, and make overarching themes clear that would not be possible in secondary data analysis. In the context of study abroad evaluation, questionnaires and interviews allow respondents to determine what defines certain aspects for the program, such as community engagement, which can show what students are gaining from the experience or if their environmentalisms are shifting (Geyer 2017). One significant downside to this data collection method is that it can only capture how people are thinking and feeling in a given moment, not their behaviors and actions (Babbie 2014). When it comes to eco-social relationships and students' environmentalism, what students think and say about the environment does not necessarily explain their actions (Kennedy 2022). To understand the behavioral aspect of a student's study abroad experience, a participant observation approach to fieldwork was more advantageous because the results revealed actions and behaviors from the study group (Babbie 2014). Some downsides to this method are that this data collection can be more difficult to organize and analyze. Utilizing a variety of data collection tools allowed me to better understand students' environmentalism and point to key elements of the study abroad experiences that impacted their perception and emotional connection.

Chapter Three: Investigating Students' Environmentalisms

3.1 Pre-Field Analysis

The sample population, or the students in the TIERA program, included a total of ten students, not including myself, but only data from six participants was used. This smaller sample of students was necessary due to a lack of continuity in the student experiences across all individuals or a lack of data regarding certain students in the program. Because the goal of this research is to track students' environmentalism before, during, and after a study abroad experience, I could not include students who did not participate in the same student experiments as the rest of the group, or students who were unavailable for post-field interviews. In addition, I did not include the other undergraduate student carrying out sociological work because she was involved in the process of developing data collection tools and felt her interview responses would be biased. This left me with six participants who I was able to observe and engage with over the course of the study abroad experience and their return to campus.

3.1.1 Student Introductions

Within the TIERA program study group, there is variety amongst student backgrounds. These characteristics and experiences informed their relationship with nature, especially during childhood and before they came to Tulane University. There are two sophomore students, with pseudonyms Sarah and Lucy, who are the youngest of in the study group. As sophomores, they are not completely decided on their major, but during the time of data collection in June 2022, they are both considering double majors in the science and environmental studies field along with the humanities field, such as public health or political science. Both are nineteen years old and have jobs affiliated with the university. One sophomore has a Socially Concerned eco-type,

while the other has a Northern Conservationist eco-type. The differences in their eco-social relationships, or eco-types, are due to their differences in background, including where they grew up, socioeconomic status, and racial identity.

There are two students in their junior year of college who are a part of the study group. They are twenty and twenty-one and come from very different backgrounds. The first student, Spencer, is from the Midwest, and focuses his studies on the field of biology. At Tulane, he works in a biology lab and is interested in connecting his work in the lab to research at FCAT. His pre-field interview pointed to him having a Northern Conservationist ecotype. The other student, Chloe, focuses her studies on both biology and the humanities and grew up in a small town in the Northwest. Chloe spent a lot of her childhood outdoors hiking, swimming, and biking near her house. Based on her pre-field interview, Chloe's eco-type category was Socially Concerned.

In her senior year of college, Ana, another student who is part of the TIERA program was twenty-one and focusing her studies on the humanities and the arts. She identifies as a Black woman and was born in the Northeast in an urban city, but moved to the South when she was young. She fits the description of the Eco-Disengaged eco-type in the pre-field interview. She is the only student who fit this eco-type during pre-field evaluations, making her environmentalism shift throughout the study abroad experience particularly interesting. Understanding how a student, like Ana, who does not have a background in environmental studies develops her environmentalism throughout the TIERA program speaks to the efficacy of study abroad in higher education.

Finally, there is one grad student who is a part of the TIERA program Justin. The twenty-one-year-old Black man focused his studies on health and wellness and the biology field. He did

not focus on environmental studies during his undergraduate degree, making him new to concepts such as “community-engaged conservation”. Although this project is marketed towards and developed for undergraduate students, Justin made a personal connection with the ecology professor who created the TIERA program and expressed an interest in developing a biological research project. He joined the fully funded TIERA program and participated in all of the student experiences, making him a viable member of the study group. He is the only student who is from the same state as the university. His eco-type, according to the pre-field interview, was a Northern Conservationist eco-type.

Figure 1: Student Code Sheet

Name	Year in College (Age)	Location of Upbringing	Current course of study	Racial Identity	Reported Socioeconomic Status	Pre-field Eco-Types
Spencer	Junior(20)	Suburban Midwest (USA)	Biology and Psychology	White	Upper Class	Northern Conservationist
Sarah	Sophomore (19)	Suburban South (USA)	Biology and International Relations	Black and Asian	Middle Class	Northern Conservationist
Ana	Senior (21)	Urban Northeast and rural/suburban South	Childhood Psychology and Art	Black	Middle Class	Eco-Disengaged
Chloe	Junior (20)	Rural Northwest	Biology and Latin American Studies	Latinx	Upper-middle Class	Socially Concerned
Justin	Grad Student (21)	Suburban/ urban South	Health and Wellness	Black	Lower-middle Class	Northern Conservationist

Lucy	Sophomore (19)	Northwest	Environmental Studies	White and Hispanic	Upper-middle Class	Socially Concerned
------	----------------	-----------	-----------------------	--------------------	--------------------	--------------------

3.1.2 Eco-Social Relationship Themes

In terms of gender, there were two people who identified as men and four who identified as women, creating a slight female majority. In addition, the sociological researchers, including myself and another undergraduate, were female, as well as the program coordinator. The Teacher’s Assistant for the TIERA program identified as male. In our small group discussion, I observed that female students were more likely to speak up and share their ideas, but in larger workshop scenarios where the FCAT workers, who are majority male, were present, female students' participation decreased. Across all study abroad programs and student genders, student participation has been rising, with more than 200,000 American students receiving credit abroad, 64 % of which identify as women (Goldoni 2013). Across countries in the Global North, and the United States especially, female students are more likely to study abroad in order to gain more experiential learning and professional development opportunities (Mol 2022). Many arguments have been put forward to explain this gender gap in global learning. Tomkins et al. (2017) focused on women’s’ heightened intercultural sensitivity, motivating them to be curious about and accept differences among cultures. Many researchers analyze the effects of many variables, including the influence of authority figures, family socioeconomics, and the frequency of peer interaction, and how their impact varies across gender (Salisbury 2010, Shirley 2006). Another significant aspect of gender differences in study abroad is the representation of women in subject areas that have more opportunities for global learning. Women are more likely to study within non-STEM majors, which have a wider variety of study abroad opportunities at most

universities, such as Humanities and Social Sciences, compared to STEM majors (Thirolf 2014, Di Pietro 2022). This cohort of student received full funding, which allowed for students who might not get to study abroad to have that opportunity. Within the TIERA program cohort, female students are more likely to have non-STEM majors, such as public health or international relations, whereas male students are more likely to have STEM majors, such as biology or evolutionary ecology. The nature of this program was created to bridge across STEM and humanities, which could explain the nearly equal gender participation.

Finally, many students, both male and female, are studying in both areas of study. For example, three students are majoring in Environmental Biology and another major in the humanities, such as Psychology. Researchers find that high academic performance is an important indicator of which students study abroad (Di Pietro 2022), and although female students are found to perform better academically, the fact that six of the seven students in the TIERA program, two male and four female, are double majoring highlights the above average academic performance of the group.

The range of ages in the cohort was 19 to 21, which allowed students to find commonalities between one another. The students were all coming from Tulane University, and with an undergraduate population of 8,000 students, students were more likely to know one another or at least have similar social circles. Students were all a part of Generation Z, or people born between the ages of 1997 and 2012. In general, people within this generation are more focused on environmental concerns, and they express that concern through their “green purchasing behavior” (Kanchanapibul 2014). In my interviews, I found that the Northern Conservationist eco-type was more likely to cite consumer habits or lack of education as the main causes of

climate change. When I asked Sarah, 19, a rising sophomore from the South and a Northern Conservationist eco-type, what she thought caused climate change she simply said,

“Humans do.” She elaborated, “...if you're constantly using single use items and discarding them, then that adds up over a lifetime. And if everyone's doing that, those little plastic cups and plastic water bottles that you throw away in your lifetime, they're gonna stay here forever. And those have detrimental effects on the environment.”

She saw an individual’s carbon footprint as a major problem, and when I asked her about solutions, she mentioned educating people about the impact of their consumption. In contrast, Ana, a rising senior and an Eco-Disengaged eco-type, points to large corporations as the main causes of environmental problems, pointing out,

“If you're talking about physical actions I take, then I'm not [changing my daily life] because besides organizing and trying to force people who have the power to do something about it it's kind of miniscule and it would just be putting myself at a discomfort for practically no change.”

Although both students are part of a generation that is generally concerned about consumer habits, the Northern Conservationist students were more likely to ascribe to the neo liberalization of environmental regulation, or the reliance on individual market decisions to solve issues like climate change (Harrison 2021). This ties into the framework of the Global North, found in traditional academic and public policy systems in the United States (Guha 2021). As students continue to learn more about capitalist systems and their influence on environmental issues, it can cause feelings of disillusionment and powerlessness, along with a movement away from the Northern Conservationist eco-type.

Students in the TIERA program are from a variety of states, including Southern states, such as Mississippi and Louisiana, Midwestern states, such as Kansas, and West Coast states, such as Oregon and California. Within these states, students lived in different areas, ranging from rural

areas in and around farms to very urban areas in large cities, such as Los Angeles. The location of a person's home physically and culturally has impacts on their eco-type categorization (Kennedy 2022), including their access to green spaces or "wildlife" and their connection to certain environmental problems and solutions. Spencer, a student from the Midwest and a Northern Conservationist eco-type, says unsustainable agriculture is the cause for environmental problems such as freshwater and the nitrogen cycle. In high school, Spencer participated in controlled burns of prairie to generate regrowth and lived in a state with a good amount of agriculture, allowing him to become more aware of the issues with the United States' agricultural system.

Many studies have found that people from rural areas hold less environmental concerns, or urgency towards the severity of ecological harm, than their urban-living counterparts (Freudenburg 1991, Kennedy 2022). This causes a change in affinity towards the environment, meaning these social groups relate to the natural world through a different eco-type lens. This geographic distinction could be caused by many factors: the urban residents live in a highly human-modified environment, causing them to see more environmental impacts, such as air pollution, day to day. People in rural areas are more likely to interact with nature every day, especially in their jobs, and use the land as an extractive resource, whereas people in urban areas might only interact with the natural environment in a leisure capacity. Although these aspects of daily life have an impact on environmentalism, findings about individuals in rural and urban areas have been mixed (Freudenburg 1991). In some instances, living closer to the natural environment causes rural residents to appreciate its complexity and importance more, and lead to environmental concern, while other situations cause rural residents to rely on the land for economic stability, leading them to prioritize growth or development. In the case of the TIERA

program, students are shaped by their geological background, but they have all lived in an urban area, New Orleans, for at least a year. They have lived in an area with little green space and witnessed the reality of city life, with the unique characteristics of New Orleans as a city below sea level, causing flooding, and prone to natural disasters. Many experienced a natural disaster, such as Hurricane Ida and its aftermath. Almost all students told me that they had more access to green space in their hometowns, and that they had a difficult time interacting with the natural environment at school. However, the variety of students' background and childhood environments did impact their environmentalism development.

Students who were from suburban areas spoke about the nature reserves that were near their houses, highlighting controlled environments as “pristine nature” and upholding the perspectives of the environmentalism of the Global North (Lewis 2021), an eco-social relationship found in the Northern Conservationist eco-type. Sarah, a student from a large suburb said,

“One of my favorite parts about it [hometown] is just, there's a lot of green spaces, there's multiple nature preserves, a lot of trails, a lot of parks. And that's always been the norm for me, and especially my neighborhood, I lived across the street from a really big park.”

Sarah's idea of green spaces is extremely different from Chloe's, a Socially Concerned student who grew up in a rural, small town, who said,

“...because from my house, I can bike to mountain trail systems, and I see bears there. And people fish all around me, I live at the convergence of two rivers.” She added, *“And I just grew up in a place that was super green and I was super privileged in that way.”*

Students who grew in rural areas with more wildlife were more likely to feel as though they had been out in nature for as long as they could remember. When I asked Chloe about the first time she remembers being “in nature”, she thought about it for a moment and said she couldn't remember a particular moment and said she did remember an especially beautiful moments at

sunrise in the mountains near her house. Other students who grew up in suburban or urban areas thought of times they travelled to see nature as the first moment, such as visiting the Cayman Islands. This shows a difference in what nature means for students, with some seeing nature as their backyard, and others understanding it as a far-off place.

Even though students are all from the United States, there are still differences in their environmental framework background, falling in categories of the environmentalism of the Global North, who picture greenery and the ocean in far off places as “the outdoors”, whereas the “environmentalism of the poor”, which includes the environmental justice movement in the United States (Guha 1997, Harrison 2021), recognizes all of their surroundings, natural or anthropogenic, as the environment. These frameworks influence students’ eco-types. Northern Conservationists are more likely to frame environmentalism through a Global North perspective and the Socially Concerned eco-type is more likely to understand their relationship to the natural environment through the framework of the “environmentalism of the poor”.

In a similar sense, students had a variety of socioeconomic status via their family’ annual income, impacting their privilege and access regarding the environment. The TIERA program is fully funded, allowing students to study abroad who might not be able to in other programs. This allowed for more diversity generally and created a group of people with differing experiences and opinions. The program leaders, including Tulane professors and administrators, recruit students who do not usually get the opportunity to study abroad, such as students from low-income households, students of color, and athletes at Tulane University. In general, students from a high socioeconomic level mentioned leisure activities in nature more often than those with lower socioeconomic status. Students whose families had jobs or businesses involving the

environment, such as farming, spoke about being in nature as a chore because of the work they performed. Ana, an Eco-Disengaged eco-type and a senior whose family owns land said,

“I was always doing manual labor.” She explained, *“We had land from my family, passed down through family in Mississippi. So then I was outside a lot more... we didn't live on the land because it was on the outskirts of the city. But it was a lot more [work] to do. And then our restaurant was also on an acre of land by a creek.”*

She also spoke about going outside as a last resort, or an opportunity to get out of doing work inside as a child. In contrast, students from higher socioeconomic status talk about interacting with nature as traveling to other countries, hiking, and visiting national parks. For them, nature is a spectacle that is not associated with work. Wealthier social groups are more likely to frame their eco-social relationship in the terms of the environmentalism of the Global North because they do not feel their immediate surroundings being impacted by environmental harm. They tend to separate social environments from natural environments, allowing them to fund the preservation of “wild” spaces while continuing to harm the environment with their daily actions within anthropogenic spaces.

Socioeconomic status can be understood from a global perspective as well. Students are from a country in the Global North, where organizations that ascribe to mainstream environmentalism receive a large amount of funding and are run by elite actors who have a high socioeconomic status, focusing on preserving “wild spaces” and individual’s consumer practices (Harrison 2022). Students grew up learning about and recognizing certain norms in environmentalism, including ideas of a “pristine nature” as untouched by humans (Guha 2013, Harrison 2021). These perceptions are reinforced by organizations such as the National Parks System which causes the erasure of communities, such as Native Americans, who lived in the so-called untouched land. These norms, along with the historic removal of people of color from their

natural environment, create “white spaces” of environmentalism that are unwelcoming towards people of certain socioeconomic status and race (Taylor 2016). This can leave individuals feeling as though they do not have a relationship with the natural environment and cause them to connect certain emotions, such as fear, to being in nature, which reduces levels of affinity and changes people’s eco-types.

On the other hand, there have been organizations in the United States that frame environmentalism through ideas of environmental justice, centering disenfranchised communities and fighting against environmental issues that are directly harming people’s quality of life (Harrison 2021). These movements are usually led by actors who are being directly harmed by environmental issues and share many similarities to environmental movements in the Global South, in that they recognize environmental issues as interconnected with social issues and they receive little funding (Lewis 2021). Some students in the TIERA program have learned about environmental movements through this framework, in an academic setting or in a real-world setting, which have strengthened their affinity toward the natural environment and facilitated a Socially Concerned ecotype (Kennedy 2022). Students who have more experience with the mainstream environmentalism in the Global North are more likely to have a Northern Conservationist eco-type.

In terms of racial identity, students within the TIERA program had diverse backgrounds, with four of the six scholars identifying as persons of color. In addition, many students had a mixture of racial backgrounds. An individual’s race has an impact on their environmentalism through their perception of environmental relationships. Discourses surrounding environmental racism, or the targeting of black and brown communities for toxic waste facilities and large factories highlight the proximity that many people of color have to environmental issues (Taylor

2022), causing them to lead environmental justice movements out of necessity, which is different from the mainstream environmental movements (Harrison 2022). In many cases, students of color were able to draw connections between racial and environmental issues, such as water quality or prison reform, highlighting their familiarity with environmental justice movements. One student, Ana, said succinctly, *“If we got rid of white supremacy, we probably wouldn’t even have climate change.”* These students have a high affinity for the natural world, but they are able to see the structural obstacles that uphold both the systems of oppression that certain social groups face and the environmental harm caused by those systems.

Students of color were also more likely to mention racially defined issues, such as the prison industrial system or police brutality, as the most important social issues of our time. When speaking about systemic racism, Jason, a Northern Conservationist said,

“I feel like there is a component of where people are placed. And they're placed there for a reason, like these communities are set up in certain ways that keep them from accessing good schools and good food.”

These compounding social issues can cause students to be more focused on the human-centered aspects of environmental solutions, giving them a Socially Concerned eco-type. They might get more involved in environmental movements, especially environmental justice organizations that draw connections between racial and environmental problems and solutions. However, other students might have different reactions to so many issues magnifying one another. In the case of one student, Ana, it caused her to prioritize other issues over environmental problems because she feels a sense of hopelessness towards climate issues, giving her a Fatalist eco-type, although still Anthro-centric. She expressed this sentiment, saying,

“But also, there's so many social issues going on, that it's easy to be sidetracked from climate change with someone's immediate death or something that immediately impacts me or my community or my family, which happens all the time.”

She went on to say that climate change can seem kind of “far off” and she felt that she could have more of an impact on the issues facing her community. This quote highlights the ways that people who come from minority communities are distanced from the traditional environmentalism of the Global North and a more likely to be characterized in a Socially Concerned eco-type. They are facing multifaceted issues that need a lot of immediate attention, leaving thoughts about environmental issues to fall to the wayside. Emily Kennedy writes, “But the chasm between their current life and the ideal environmentalist feels too great to bridge” (Kennedy 2022). Although she is speaking more about everyday tasks, such as taking care of children, I believe this can be applied to other issues, such as systemic racism. Communities of color are counteracting problems, such as food deserts and water contamination (Pellow 2018, Harrison 2021) while juggling the results of economic and social disparities, forcing them to work multiple jobs or face police brutality. They are not given the time to think critically about climate change on a global scale or call their governor about the most recent bill concerning a new coal plant.

Finally, another aspect of student demographics is religious background, which can impact a student’s relationship to the environment. Students who had a strong religious background, specifically those who grew up in the Cristian faith, spoke about nature as “God’s creation”. Studies have found the environmental movement to be historically secular up until the 1980s and that people who identify as more Christian are less likely to be concerned about the environment, but there was a shift in the United States that caused a change in mindsets, called Christian eco-theologies. One group focused on stewardship, another on eco-justice, and a third on creation spirituality (Kearns 1996).

The stewardship group focuses on the mandate in the Bible saying that humans must take care of God's creation, or the natural environment. Sarah expressed those sentiments as she experienced them in childhood, saying,

"...it's really important that we take care of it [the Earth], not just for ourselves and future generations, but also show that we are appreciating God's gift for us."

Kearns describes the eco-justice group who links environmental concerns with Christian teachings, such as sharing food and money with the poor. Finally, the creation spirituality group focuses on positioning humans within the larger pantheistic creation (Kearns 1996). Students told me that religion helped them feel more in touch with the Earth from a young age and that they used the Earth for spiritual grounding. This connection to religion impacts environmentalism by using existing frameworks to reframe the natural environment as a "gift", and humans as "one with" their surroundings. Religious affiliation was a surprisingly salient characteristic across students in the Northern Conservationist eco-type, with all the students in that category expressing a connection to their religious background and environmentalism.

Jason, a graduate student and a Northern Conservationist eco-type said:

"And a big part of Christianity is taking care of the earth. And so that's another reason why I want to do more stuff like this [conservation work]. Because I want to be more in touch with the Earth... because of the fact that it's my home."

When students arrived in college, they entered the world of prestigious education. This adjustment to a new environment was difficult for some students, with many noticing there was not a lot of green space in New Orleans. When I asked students how they interact with nature in their day-to-day life, many of the students thought back to their hometowns first. Chloe, a student with a Socially Concerned eco-type from a rural area initially described her time at home, saying,

“I bike. I pick fruit. I spend a lot of time swimming. Most people where I live don't have AC. So, when it gets hot, we swim.”

We went on to talk about New Orleans, and she said she still bikes, but there's a lot less green space in the city. Lucy, another student in the Socially Concerned eco-type reminisced on her time at home, saying,

“When I'm [at home] I'm going on hikes and doing outdoor stuff so it's way more every daily for me and most of my day for me [at home].”

She went on to tell me that in New Orleans, she goes to the local park every so often, but does spend nearly as much time outside. In general, students felt distanced from nature when they were at Tulane, expressing similar sentiments about the lack of green space, especially when it comes to leisure activities in nature such as going to a beach or hiking.

3.1.4 Discussion

In the introduction of students and the discussion of eco-social relationship patterns across students, student eco-types became clear. To summarize, students in the Northern Conservationist eco-type, including Jason, Spencer, and Sarah, were students from Midwestern and Southern states, who came from different socioeconomic and racial backgrounds, but all have religious upbringings. They all had an area of study in the biology field and were more likely to talk about environmental problems without mentioning humans. For example, Spencer and Sarah both mentioned unsustainable agriculture as an environmental issue, speaking about water waste and soil degradation, but not mentioning the ways agriculture can impact communities, such as illness caused by pesticides. This shows environmentalism framework that separates humans and the environment. Students with a Socially Concerned eco-type, including Lucy and Chloe, were from the Northwest and were both from middle-upper class families with relatively non-religious upbringings. They told me about spending most of their time outdoors during childhood, usually doing leisure activities, such as hiking or biking. They expressed

concern about the communities impacted by environmental problems, sharing stories about the experiences they had in their hometowns fighting for local issues. These students expressed more uncertain feelings about conservation as an environmental solution. In group discussions, they were more likely to criticize experiences they had that did not align with their environmentalism. The final student, Ana, was in the Eco-Disengaged eco-type. She expressed more feelings of hopelessness in regard to environmental issues than other students. She comes from an upper middle class religious family, and is very involved with social issues, such as racial discrimination, that she separates from environmental issues. She does not feel it is her responsibility to solve environmental issues, and she expressed conflicting feelings about the natural environment. When describing childhood memories, she remembered playing outside and feeling free, but as she got older, she associated being outside with doing work and feeling uncertain about her surroundings.

These eco-types reveal students' eco-social relationships before experiencing the on-site programming at the FCAT station. By incorporating experiences, emotions, and frameworks into these eco-types, they are meant to be fluid, showing students ability to move from one eco-type to another.

3.2 On-site Programming

When researchers and program directors create and then evaluate a study abroad program, they focus on the student experiences before, during, and after the trip that determine whether a student becomes immersed in the culture of the host country or area, if they build relationships with their cohort members, and if they have concrete takeaways or tangible and intangible skills that they can understand and apply to their studies and life path thereafter (Ogden 2021). Studies on global learning have shown that short term study abroad can have an

impact on students' cultural knowledge and their academic and leadership skills (Geyer 2016, Core 2017). These types of study abroad programs allow for students who would not be able to study abroad for longer periods, such as semester long programs, to have an opportunity to engage in intercultural learning. Short term study abroad allows students who are financially restricted or have other obligations on campus, such as athletes, to travel for shorter periods and reach similar goals to those who do long term study abroad (Lewis 2005). However, for these programs to meet the same standards of transformational experiences and enhanced understandings of another culture, certain aspects of the program must be present. Tammy Lewis writes that students should make connections to campus coursework, experience community-based research, participate in community-based service learning, and use interdisciplinary methods (2005). Just as these aspects of study abroad strengthen programs, they also allow students to critically reflect on their own outlooks, in this case having to do with their eco-social relationships. Most research shows that short-term study abroad cannot be as effective as its long-term counterpart, but in the case of return visits, it can be a step towards students' introduction to global learning and different environmentalisms (Lewis 2005, Core 2017).

While at the FCAT, undergraduate students had experiences within the station and in the communities/areas around it. In study abroad programs, students are encouraged to spend time in these new places and reflect on what they felt and learned afterwards. In the TIERA course, students visited an Afro-Ecuadorian community, had several workshops with FCAT workers, had discussions amongst themselves, visited two local community members with alternative land use, spent time in the rainforest and at a large lake, called La Laguna, and shadowed researchers working in the field. Throughout study abroad experiences, I observed students' interaction with both the natural world and the people they met and spoke to students about their perception of

each event. Students had varying reactions and thoughts about activities, depending on the perceived knowledge gained and their comfortability with the experience, which gave insight into their eco-social relationships throughout the study abroad process. Below is a brief description of each experience.

3.2.1 “Expert” Presentations

Presentation from the Ministry of the Environment:

The day after the TIERA students arrived at the station, a representative from the Ministry of the Environment and the head of the Mache Chindul reserve visited the station to give a presentation to everyone, not just the cohort, about the conservation and outreach the government is doing in the region. Around 40 people met in the comedor, or eating area, to listen. For context, the FCAT field station and reserve are located within the larger Mache-Chindul reserve, an area of segmented tropical forest in Northwest Ecuador. The Mache-Chindul reserve was created by the Ecuadorian government in 1996, and many non-governmental organizations, including FCAT operate within it. It was created because researchers and government leaders felt that it held very important biodiversity and resources, such as water, and needed to be protected. She began by giving a brief overview of this history, and mentioned that when Mache Chindul was created, there were people living within the reserve limits. The area, covering 120,000 hectares, is now managed by five people in the Ministry of the Environment. She said that their biggest project is currently concerned with educating local communities on biodiversity education and enforcement of deforestation laws. By focusing education on schools, she believed they could help students understand conservation and give them other ideas about the environment rather than their parents’ ideas, who she said were “stuck in their ways”. They have NGOs within their reserve, which help to buy land and stop deforestation, but she also

spoke about other foreign groups or individuals who were coming in and cutting down trees with no consequence. Overall, this area faces issues of conflicting property rights, with some people owning land while others have possessory rights only. She put forth some solutions for people living within the reserve, including ecotourism and sustainable cacao farming, and ended by saying the job was very difficult because it involves so many aspects of life in Ecuador, including the social, economic, and environmental dynamics. In conclusion, she told the group that she wanted to share a vision of “correct management” of the environment.

After the presentation, students had a better understanding of the socio-cultural dynamics of the area around them. In interviews, students could more confidently answer questions concerning the main form of income in the area and how they imagined communities operated. Some students were confused why people in the area did not want to protect the rainforest. Spencer, a Northern Conservationist eco-type student told me after the presentation that he felt like he only heard one side of the story. This showed me that he was interested in hearing about the social aspects of the conservation efforts in Ecuador, which was a shift away from his original eco-type. The next student experience chronologically was visiting a local community and speaking with them about the same dynamics discussed with the government representative, giving students an opportunity to contrast the two experiences and what they learned. This activity was not community-engaged and reaffirmed a Global North perspective amongst students. Even during the description of the formation of the reserve, the government representative did not mention any communication with communities before undertaking the project. This reaffirms a Northern Conservationist eco-type in students, who understand rainforest conservation as the halting of human action and the removal of communities from the “wilderness”.

Presentation of the Reforestation Plot:

The reforestation plot is a small piece of FCAT's larger reforestation project, meant to create corridors of forest for flora and fauna to move throughout via birds flying or seed dispersal. The TIERA program students, several professors, and the local community members working at FCAT, known as FCATeros, working on the reforestation project walked to the site, which was originally clean cut, and now held many seedlings of palms that were planted to generate plant growth in "islands". The walk to the site took students through a patch of heavily forested area and then into a newly purchased piece of land where reforestation efforts were occurring. The stark difference between the cool and shaded forest to the bright and relatively empty reforestation plot showed students how stark the land fragmentation is in the area. In the plot, there were groups of seedlings spread throughout. The researcher from a higher education institution in the United States told us these clusters of trees were meant to create initial canopy cover that will allow smaller flora to grow and eventually bring more organism diversity to the area. Foreign researchers worked with FCATeros to decide which palms to plant and then FCATeros did most of the work to cut down the tall grass in the area, germinate seeds, and plant seedlings over the course of the year. The goal of the presentation was to show students a large project that was happening currently, sparking interest in students to get involved with the project during their next visit.

This student experience had more community elements within it, but it still did not exemplify community-engagement in the field. FCATeros and foreign researcher worked together to pick a plot for the reforestation project, but the development and execution process of did not break down power structures, with foreign researchers doing most of the conceptual work and FCATeros doing the manual work. This experience upheld power differentials that exist with

many higher education and study abroad institutions and programs, framed by the environmentalism of the Global North (Guha 1997, Suspitsyna 2021). TIERA students had a variety of responses to the presentation, ranging from mild disinterest to curiosity and excitement. For students who were not studying environmental biology or other “hard sciences”, such as students who were focused on public health or psychology, the presentation didn’t spark research ideas and it was filled with scientific jargon that was more difficult to follow. However, in general students still had positive feelings towards the reforestation project generally as an aspect of conservation, and thought it was a good idea. Lucy said about the project,

“Conservation and restoration went hand in hand. And it was interesting, because, when we were looking at the different plots... they're not mutually exclusive.”

Many students showed interest in watching the restoration plots grow and were curious to see what the area would look like in the year to come. Ana told me about her observation of collaboration between FCATeros and foreign researchers, saying,

“And so, he would be talking and then he would maybe stop and talk to FCATero. And say, ‘Oh, what is this again?’ And the FCETero would be talking and then [another professor] would say, ‘Oh, wait, you forgot this’. So, it was very communicative.”

Students felt more hopeful about conservation efforts after visiting the plot and hearing the methods, with one student, Chloe, imagining,

“But I don't know, it's exciting. If I came back here in five years, what is it going to look like? And it actually seems like it could have the potential to really bring back the rainforest? It seemed very hopeful when we were sitting there talking about it.”

Students also noticed the dynamics between researchers, who created the reforestation concept and methods, and the FCATeros, who did the manual work to make the project happen. A few students were not sure how to feel about this dynamic. Lucy said,

“...it's kind of like they did all the work so that we [foreign researchers] could plant the tree... I don't want their side of the work to be underappreciated, because I think that they could just as much be collecting the data that the Tulane researchers [collected].”

This student felt that the power dynamics between “experts” and community members were more static, and the dynamics were created because of larger social systems that separate higher education knowledge from traditional knowledge of an area. This fits within the framework of Global North environmentalism, which views foreign researchers as “elite” (Guha 1997).

Because researchers came from a background in academia, they were more suited for the theoretical aspects of the project. Lucy has a Socially Concerned eco-type, meaning she was already inclined to think about the social aspects of environmentalism. After returning to the station, Lucy continued to emphasize the FCATeros role in the project as vital, making sure the other students understood the contribution they had made to the reforestation project.

3.2.2 Site Visits

Afro-Ecuadorian Community:

The first site visit the Ecuador Scholars took was visiting an Afro-Ecuadorian community in Esmeraldas province. We drove away from the FCAT station for a few hours and then hiked to a secluded community where students met with residents and spoke to them about their history and day to day life. A leader from the community shared their history in the area, including their conflicts with the Ministry of the Environment, and their difficulties accessing certain necessities, such as clean water or medical attention, due to an inadequate road into town. At first, community members seemed unsure of students’ presence, but as time went on some community members began to speak about their experience. The women in the community showed apprehension towards speaking in the large group, but the teenagers and young adults were talkative. Afterwards, students played soccer and had informal conversations with

community members who felt comfortable talking, especially if they were able to speak in Spanish.

Students visited the Afro-Ecuadorian community the day after the representative from the Ministry of the Environment came to the station, allowing the TIERA program to hear from both sides of a conflict concerning environmental and economic issues. Spencer, a student in the Northern Conservationist eco-type said,

“I think the people in Viche... their point of view made total sense. The government told them to move out here, told them to cut down the rainforests and build farms. And then it comes back 20 years later, and says, actually, you can't do any of that. But we're not going to help you out at all. So, I mean, I would hate the government if they did that to me.”

This trip had complex dynamics that made some students uncomfortable, but in reflection students found some lessons to take away from the experience and some felt very strong emotions. When students arrived, the community looked virtually empty, and they quickly became aware that the community members did not know they were visiting. When a community member came out to greet the program organizers and professors, he informed them that there had been a miscommunication about who was coming to the community and on which day. This realization and interaction made students visibly uncomfortable, prompting many students to look to program organizers for answers about “a plan”. In most cases, students were not able to tell community members about their intentions as visitors because they did not speak advanced Spanish, which caused a language barrier. After a few minutes, community members gathered in a structure with a roof but no walls and dirt floors, where students gathered around in small groups. During the conversation, community members were standoffish and wary when organizers and students realized that community members thought they were from the Ministry of the Environment. This miscommunication led into a long conversation about FCAT is an NGO and its goals. During this experience, students saw firsthand the tension between the

Ministry of the Environment and communities within the Mache Chindul reserve. Students inadvertently fell into the “colonial student” paradigm by visiting a community and having difficulties creating intercultural relationships, and TIERA program directors created a situation where student voyeurism was unavoidable (Ogden 2007). Ogden writes that recruiting community members, especially for pay, to interact with students, can amplify feelings of awkwardness that students have, and perpetuate the idea that communities can be manipulated for the use of study abroad (2008). Students were aware of this dynamic and did not want to interact with the community in this way. While in the community, some students removed themselves from the experience altogether by walking away, while others became quiet observers rather than active participants. Students who were able to speak Spanish felt more comfortable speaking up in group discussions.

When students returned to the FCAT station and met for discussion, they expressed their feelings of guilt for intruding on the community. Chloe, a student with a Socially Concerned eco-type said, “I think I learned what not to do,” in reference to community visits. However, she did not provide any suggestions for the “correct” response or actions during a community visit. Students felt they were intruding on a community that did not want them there. However, some students talked about what they learned from the experience, including how to sit in uncomfortably and adjust to changing situation. The degree of guilt felt across students was varying. During a group discussion, Chloe said the visit made her feel guilty about her travel and she thought about how the money for her plane ticket could have been put towards the community. Other students thought it was important to visit so that foreign researchers and students could be aware of the community’s needs and work with them in the future. Spencer recommended,

“...when you're going into those kinds of communities like that, it feels like it needs to be more... either smaller groups or there just needs to be more communication”.

“That was my first time viewing in person, the interactions that they tell you about in social research that you shouldn't do.”

Ecotourism site visits:

Students visited local landowners who decided to find alternative uses for their land that did not involve complete land clearing for monocropping cacao or cattle grazing. At the first reserve, the landowner, Don Gavilan, has many fruit trees that he plants, harvests, and sells, along with some land allocated to cacao and the rest preserved as primary rainforest. He has an ecotourism business model, with housing for guests, tours of his land, and a chocolate making activity. The TIERA group hiked through this area and saw beautiful waterfalls, swam in small ponds, and took in the plant and animal life around them. Afterwards, they spent time going through the process of making chocolate, from roasting the cacao, to grinding, to eating. At another local ecological reserve, a similar business model was employed. Students hiked and saw a variety of fruit trees. This landowner had a larger focus on animals, with large fishponds, and several reduced monkeys and birds.

These experiences differed from other study abroad experiences because they were focused on ecotourism as the vessel for student engagement. Thinking about tourism in a study abroad context brings up questions of the “colonial student” (Ogden 2007). Sociologists describe these types of students as study abroad participants who do not want to leave their comfort zone of familiarity and instead would prefer to “experience” other cultures from a safe distance, which align perfectly with ecotourism experiences (Ogden 2007). These site visits are not community-engaged scholarship. Although they build trust between a single actor and the NGO or study abroad program, they do not serve the community’s well-being and they do not redefine power dynamics (McCloskey 2013). This activity reaffirms the idea of study abroad students are on

vacation, using the world and the people around them however they see fit (Zemach-Bersin 2009, Ogden 2021,). Ecotourism is the perfect situation for these students, allowing them to “experience the novelty of the macro-environment of a strange place...” (Ogden 2007, page 44). In addition, ecotourism is not community engaged because it does not benefit the well-being of the community at large. When I asked students if they thought the ecotourism practices they experienced could be replicated in other households and communities, they are though the idea was unrealistic. Spencer and Justin agreed that it would take too much effort to do ecotourism on such a broad scale, and Lucy pointed out that there is not enough tourism in the area to make businesses viable. I think students viewed this activity as a fun and interesting experience, but nothing more. Framed within the environmentalism of the Global North, this experience was not community-engaged.

Laguna de Cube:

The TIERA program took a day trip to a large lake near the field station to view the biodiversity and spend time doing leisure activities, such as swimming and sunbathing by the water. During post interviews, students remembered this site visit as the most enjoyable and carefree, telling me stories of rowing in boats across the lake and feeling relaxed in the water. When students arrived at the lake, they received a short presentation from the program coordinators explaining the significance of the lake. In the coming years, FCAT is planning to connect their private land via “strategic land purchases” to the ecosystems in and around the Lake. This will connect fragmented forest and promote biodiversity within the Mache Chindul reserve (Browne 2016, Perlin 3/9/23). After the presentation, students were free to roam about the areas, drinking from coconuts.

This experience was significant because it framed the natural environment as a place for relaxation a leisure, which aligns with the mainstream environmentalism of the Global North. Guha writes that this environmental framework is founded in privilege, allowing nature to be accessible, but far enough away to be an adventure (1997). It is a place to visit and revel in, and then promptly leave because the environment is not a home, it is a resource, used for pleasure or consumption. This experience affirmed all of these perspectives in students, even in Socially Concerned eco-types. During the other experiences that were not community-engaged, I witness students in this eco-type grapple with the social context and implications, but I did not see the same reactions during this student experience, which highlights how natural it is for students from the United States to fall back into the normalized relationship with nature of the Global North.

3.2.3 Workshops and Discussions

TIERA Program Discussions:

Students participated in workshops and discussions within the cohort concerning the trajectory of the program moving forward and their thoughts on activities. Students checked in with themselves and one another throughout the course and verbalized what perceptions they had of themselves in this context, and perceptions they had about FCAT and conservation in general. These were usually informal meetings led by the program director and teacher's assistant, guiding students through exercises that made them think critically about environmentalism and how they want study abroad programs to be structured. Student discussion usually occurred once a day, and they were a beneficial way of tracking perception shifts in students.

The first discussion occurred on the morning of April 3, the first full day for most of the TIERA students in a secluded area overlooking the station. Students sat in a circle and shared

what they wanted to gain from their visit. Some overarching themes amongst answers were interaction with community, figuring out personal interests, immersion, and involvement with research. At this point, the group had just arrived and was still getting comfortable with their surroundings and with one another, which meant their answers were relatively short, but it did provide insight into students' eco-social relationships when they first arrived and perceived their surroundings. Students sat in a circle and went around to share their personal goals for the trip. Students' goals aligned with their eco-type categorization: Northern Conservationists students expressed an interest in observing research and conservation efforts and Socially Concerned students said they wanted to immerse themselves in the local culture and understand the community-engaged aspects of the organization.

The second discussion occurred following the visit to the Afro-Ecuadorian community, two days into the study abroad experience. As discussed above, students expressed concerns about their interactions with community members. Chloe, a Socially Concerned eco-type, said that she was seeing a lack of community-engagement and wondered what the money that went toward her airfare could have done for the Afro-Ecuadorian community. Lucy, another Socially Concerned eco-type expressed feelings of guilt, saying she "hear how imperialistic" she sounded as a white person coming into their community. Spencer, and Northern Conservationist eco-type, viewed the experience as a "necessary evil" that allowed for researchers to hear what specific services the community needs, even if it didn't feel ethical. Justin, another student with a Northern Conservationist eco-type was most concerned with the fact that they didn't know who the group was, and thought they were from the government. He applied it to himself and his community, saying her would have reacted in a similar way if put in the community members' position. The Socially Concerned students' responses aligned with their eco-type categorization

very closely, but the Northern Conservationists began to consider social aspects of environmental issues more closely and in a practical setting. Although these discussions were not community-engaged because they didn't include community members in discussion, they made space for students to critically reflect and analyze their study abroad experience along with the complexity of conservation. I believe this was a vital moment for environmentalism shift from Northern Conservationist towards Socially Concerned.

FCAT and TIERA Workshops:

Students had several workshops with the Ecuador Scholars and FCAT workers, including the FCATeros, who were predominantly men who work on biological research and forest maintenance, as well as community engagement projects. The workshops also included some of the women who worked at the station, specifically the women who worked as cooks. The workshops focused on food security in Northwest Ecuador, FCAT's role as an NGO, and how the Ecuador Scholars program fit into this initiative. The workshops began with students and FCAT workers sharing memorable stories from their life about food, highlighting the ways that food shapes not only our individual lives and experiences, but also our culture at large. Students also brainstormed ways that FCAT could promote planting native crops for subsistence. FCAT workers told students that many smallholders farmers use almost all their land for planting and harvesting cash crops, like cacao, and rather than planting their own food, they buy cheaper food from the supermarket. While the workshops never came to a conclusion on how the Ecuador Scholars could help to combat this problem, they did help students understand that research can come from a place of community-based scholarship.

Across all eco-types, students found these workshops to be extremely interesting and generally had positive reactions towards them. Most students were excited to learn from the

FCATeros about their culture, especially in connection to upbringing and food. Lucy, a Socially Concerned eco-type, said,

“...they would also talk about kind of how they grew up. And their relationships and a lot of it was their relationship with nature. They all had farms ...each of them had a connection to the environment that we were working in.”

They also understood the differences between cultures and were interested to explore those differences. Spencer, a student with a Northern Conservationist eco-type said,

“But I think more of it was just perspective taking and getting that information on how FCATeros. And how people in Ecuador, think about food and agriculture is different than the way we think about it. So, I think getting that perspective taking was really important.”

The way that students perceived their interaction with FCATeros was different across individuals, but some students perceived it as leisure, both for themselves and for the FCATeros.

Lucy explained,

“...we got to interact with all of them, I think, kind of, on their off time. And not in a work setting. So it was, I hope we got to hang out with them and not have to... I guess we weren't doing that much work with them.”

It is interesting how undergraduate students view this relationship and I would be interested to analyze how FCATeros perceive that same interaction. In terms of social dynamics, the FCAT employees are still at work when they interact with students, even when they are not doing a specific research project or doing manual upkeep in the forest, so I sense that they might view this interaction differently.

This was the first student experience that can be defined as community-engaged according to the definition and goals described by Donna McCloskey describes in “Community Engagement: Definitions and Organizing Concepts from the Literature”. These workshops work with social groups connected via geographic location and special interest, and they address issues that affect people’s well-being, in this case food systems and sovereignty (2013). The literature

lists goals of building trust amongst partners, enlisting new resources, facilitating quality communication, and improving overall well-being as individual projects become lasting partnerships between groups (McCloskey 2013). This project meets the preliminary criteria, although it has not achieved all these goals yet. This student experience is framed by the “environmentalism of the poor” that recognizes the interconnectedness of social and environmental issues and employs grassroots organizing to achieve goals (Guha 1997).

3.2.4 Research Shadowing

Students spent a day shadowing graduate students and Ecuadorian researchers with various biological experiments, learning about the details and logistics of their projects. Researchers had a variety of study topics, including birds, frogs, palm trees, and soil. The goal of this exercise was to give students an idea of what fieldwork looks like and see what they might be interested in. For this research, I focused on how students interacted with researchers and FCAT workers in the field. Students noticed the dynamics between researchers, who developed the majority of the concept and methods, and the FCATeros, who did the manual work to make the project happen. A few students were not sure how to feel about this dynamic. Ana, with an Eco-Disengaged eco-type said,

“I love the projects in general, because I just really like to see the camaraderie between the FCATeros and then the American researchers and how much of a team, partnership they were how much power, the FCATeros held in the dynamic. I think that was really cool.”

Sarah, a student with a Northern Conservationist eco-type, also discussed the dynamics between graduate student and FCATero, particularity focused on their ability to communicate despite the language barrier. She said,

“Even though her Spanish wasn't amazing, she tried. She was working so hard to be able to have her point come across...Because you could tell that despite the language barrier, they were still actually getting to know each other and having a closer partnership... despite the language barrier,

they were able to understand each other. And I think that was because outside the field work that she did, they were actually talking to one another.”

This student saw the partnership empowering both parties in the field and told me that she thought each group was able to do what they were most passionate about. She said that she noticed each person having an influence on the entirety of the projects, suggesting ideas about methodology and study sites as they developed the project.

The research shadowing allowed students to observe community-engaged scholarship in the field. These projects contextualized conservation, especially in the Global South. Students were impressed by the collaboration between graduate students and FCATeros, especially commenting on the traditional ecological knowledge that local community members shared about the area. In post-field interviews, students expressed an interest in developing their own research projects following this model and were inspired by the community-engaged aspects of the research.

3.3 Post-Field Analysis

3.3.1 Post-Field Analysis of Eco-Social Relationships

Considering students who fall within the Northern Conservationist eco-type and the Socially Concerned eco-types, along with the student who falls under the Eco-Disengaged eco-type, there is a variety of responses and shifts to the study abroad experience. Potential shifts can be measured by analyzing students' affinity levels, understanding the ways that perceived severity of social decline, moral responsibility, and personal efficacy can change, even in a period as short as two weeks. No two students had the same perception of their experience, but some overarching themes included an observation and realization of community engaged research, an understanding of the complexity of conservation, and a sense of hopefulness.

For the students, the social component of environmental issues became extremely clear during community-engaged experiences and in the absence of community-engagement. In later interviews, two students in particular spoke about how they perceived the benefits of the community engaged research at FCAT. Spencer, whose pre-field eco-type was Northern Conservationist, said,

“...before the trip, at least, I kind of thought there was a lot more value in research just for the point of expanding knowledge, you know, human knowledge, and I feel like on that trip, that kind of subsided a bit.”

Spencer explained that he is focused on research that can have actualized benefits for the community. Another student thought about bridging social and environmental discourses, especially in the biology field. Chloe, whose pre-field eco-type was Socially Concerned, said,

“Yeah. I think it's hard with ecology, because it's a lot easier to...you have the option of just going and looking at trees, and taking your data and leaving, no one's going to stop you. So, it's kind of hard to design a project that fits.”

By “fit”, she seemed to mean that it is difficult to create a community engaged research project within the traditional biological framework and research methods. This was brought up for many students, especially those who were focused in “hard” sciences. Although their perception about what research should provide has shifted and become clear, their ability to actualize a specific project that accomplishes this clarity is more difficult. Overall, students felt a new sense of duty when they returned to campus to develop a research project. Justin, whose pre-field eco-type was Northern Conservationist, told me,

“I definitely think my [methodology] has broadened. I mean, I still believe that stuff, that the environment is worth preserving. I knew there was a social component to conservation and ecology before, but it definitely wasn't something that was on the front of my mind.”

Now Justin is striving toward research that has “community benefits”, although he is still unsure of how he will accomplish this task. He told me that he needs to take more time to understand

community-engaged research and conservation in order to understand how to employ it in his work.

Students' ideas about who is an "expert" within the field of conservation, and what being an "expert" entails shifted as they experienced traditional ecological knowledge in practice, giving many students a more hopeful outlook on conservation processes. Chloe said,

"Yeah, I mean, there's definitely hope, also seeing people that don't have the same background in conservation, people that didn't necessarily go to college, do you know what I mean?"

In pre-field interviews, Chloe was very skeptical of conservation and its ability to solve environmental issues because she pointed out its imperialistic history. She continued to be concerned about this dynamic, but also recognized some aspects of this study abroad experience as a step in the right direction. She said,

"I think seeing people that have emotional connections with the area doing the conservation was really cool and practical, because that was something I felt like...I wasn't sure if that ... well, I knew it existed, but I wasn't sure it existed in a place where I'd be able to see it."

Some students, especially rising juniors and seniors had a shift in what they imagined conservation to be compared to its reality, which I would categorize as falling under their perceived severity of ecological decline. Students' experience at FACT and the surrounding communities placed them at odds with this Global North perception of ecological decline in the Chocó. Lucy a rising sophomore whose pre field eco-type was Socially Concerned, grappled with this understanding, explaining,

"I realized the depth that it's really hard to say let's conserve this land because it's not just up to us, you know, or FCAT to do that. [FCAT] is trying to buy land from other people around the area but also those people need that land to make money and support themselves."

This understanding of complexity impacted students across all eco-types, including the Socially Concerned students, such as the student quoted above, the Northern Conservationist, and the Eco-Disengaged. One Northern Conservationist student, Spencer, said after visiting the nearby Afro-Ecuadorian community, and hearing from the representation from the Ministry of the Environment:

“I said, why don't people want to save the rainforest, you know, and I got there and I was thought, Okay, this is why, and it's not that they don't want to, or they want to destroy the rainforests or anything like that.”

Students began to understand the dynamics between economic stability in the region at odds with environmental solutions.

The student who fell under the Eco-Disengaged eco-type, Ana, began to shift toward the Socially Concerned eco-type because she showed a sense of self-efficacy in her post interview, saying,

“So now I'm feeling like maybe we shouldn't, I don't think we should, impose our rule on them [study abroad host communities] or anything, but I think that we should have more of an exchange or a conversation sort, instead of ‘Oh, we're gonna help you’ and more, ‘What do you want to know too?’”

This student showed a development of moral responsibility and efficacy not seen previously, and throughout the trip she was able to find ways to apply her areas of interest to the larger TIERA program. Initially this student felt there was very little individuals could do to address climate change because transnational companies and governments were prioritizing profits and causing most environmental issues. This student continued to hold this sentiment, but she told me that her study abroad experiences allowed her to see communities that were very in tune with

environmental degradation, something she said communities in the United States were lacking. She said,

“So, I think that the way that [Ecuadorian communities] are kind of, hyper in touch with people... hyper aware of the sectors of governments that are over the environment, we can be more aware, and less detached from how we view what's going on with our environmental issues when it comes to the factories that are close by or the pollution or stuff like that.”

Reaffirming Relationships and Providing Context:

During their study abroad experience, students' eco-social relationships, or eco-types, were reaffirmed, especially for those who doubted their perspective at some point. When I asked students why they thought the trip was important for them, many said the experience alone confirmed for them the benefits of conservation and helped them to better conceptualize their own relationships with nature. Sarah, whose pre-field eco-type was Northern Conservationist, said,

“I don't really think you can appreciate it [the natural world] without going to actually see it and when you're walking in the forest... it's easy to look at it on a poster board and say, ‘Oh, this is what we're doing...’”

This student thought back to her study abroad experience often after returning home, using it to contextualize her interactions with others. Although she told me that she had experiences studying abroad that were uncomfortable, they also helped her become more self-aware and understand her positionality in relation to the natural world and other communities.

Chloe, a student with a Socially Concerned eco-type, was having difficulty understanding her place at the station if she was not doing biological research during the two-week visit, but throughout the trip realized she had a different role, explaining,

“...something I was talking about [with a professor] is the opportunity to share knowledge and have a cross-cultural experience, even if you're not traveling, because [the local residents] are not traveling. They're still getting a cross-cultural experience. And a lot of people speak highly of that, the ability to teach others and teach someone from a different place. It's beneficial, and also a source of pride.”

Christopher Ziguras and John S. Lucas discuss this finding in their chapter of the book *Education Abroad: Bridging Scholarship and Practice*, writing that the act of teaching visitors is valued by local community members, especially if they share their experience in a way that generates pride and respect (2021, page 226) This student’s questioning of what the TIERA program was offering the people at the station developed into an reaffirmation about the importance of social relationships as a Socially Concerned eco-type.

Students who did not come from a completely scientific background were able to contextualize environmental movements through smaller projects. Ana, who pre-field eco-type was Eco-Disengaged, said,

“I'm really thinking of what I thought conservation was, and I wouldn't expect to see these kinds of projects. But also, I think that's just because I'm not a scientist. So, everything in my head is saying, ‘Oh, I don't really know and so just seeing [the FCAT projects] is like, ‘Oh, this makes sense.’ But I wouldn't have known that to conserve, we need to connect rainforests. We need to do research on what? Where the birds are?”

This is a theme I saw throughout student interviews: students had a general idea of what conservation was but did not have many specific examples before studying abroad. This caused their environmentalism to be somewhat strong in the sense of affinity, but also vague in terms of practice. Above all, this trip gave students more context. The ability for students to witness the complexity of conservation and the community-engaged projects occurring resulted in shifts in their eco-social relations. Socially Concerned students became more Socially Concerned because their eco-social relationship was reaffirmed during student experiences, and Northern

Conservationist students shifted towards Socially Concerned ecotypes as they got more context concerning the complexity of environmental issues and solutions. Eco-Disengaged students shifted toward Socially Concerned because their experience provided them with specific solutions and a niche within a movement, giving them hope and an increase in self-efficacy to address environmental issues through their own areas of interest of study.

Environmentalism Disillusion:

There were several moments that made students question their eco-social relationships, but one of the main catalysts was the visit to the Afro-Ecuadorian community. As I discussed above, students had a wide variety of responses to the trip, but I found that some students found the experience much more uncomfortable than others. Black students were more likely to see the visit as a learning experience, compared to white students who characterized the visit as tense and dehumanizing towards the community. During discussions, as students spoke about their worries entering the community, I sensed that they felt embarrassed to be affiliated with the TIERA program during the experience, but students had a difficult time articulating this feeling. Ana discussed her thoughts about this dynamic, saying,

“And I think, because of the dynamics of study abroad, and how there were a few black people in our group. And how people are thinking about how study abroad can more greatly benefit the people who are studying there and less than the people who live in the places kind of like, the dynamics between Tulane and the New Orleans community...”

She went on to explain that students were feeling upset because they didn't want to play into that kind of power dynamic. This disillusionment, especially for Socially Concerned, was difficult because most of them felt powerless to control their impact on this community, even though their eco-type focuses on the importance of community engagement and is characterized by high levels of efficacy. I believe that students “bought into” the TIERA program when they

participated in the study abroad program, and after the experience at the Afro-Ecuadorian community, they were doubting their affiliation.

Students with a Northern Conservationist eco-type, who were previously talking about the importance of biological preservation, and perceived environmental solutions through a governmental regulation standpoint, a sign of mainstream environmental movements from the Global North, were confused witnessing the dynamics between the Ministry of the Environment and the Afro-Ecuadorian community. However, upon reflection, most students felt they had gained something from the trip. Sarah, whose pre-field eco-type was Northern Conservationist, said,

“There’s so many things you have to take into account when you’re taking notes on [people]. The experience that we had at the afro Ecuadorian community, that was what made me really see the two different approaches to research, if that makes sense. By seeing the ‘we’re going to observe and take notes’ type of approach being applied to something that should have been more of a conversation, and actually getting to know them before.

Even when students experienced activities that aligned with the Global North environmentalism and reinforced Northern Conservationist eco-types, they were still able to think critically about those interactions and notice how they don’t align the community-engaged scholarships. For this reason, students’ environmentalisms were able to shift although they were not exposed to very many community-engaged experiences. The experiences they had that affirmed Socially Concerned eco-types, including the workshops with the FCATeros and the research shadowing, provided them with a better understanding of what community-engagement truly means, and their interactions with other students, especially those with different eco-types had an impact of their environmentalism.

3.3.2 Post-Field Eco-Type Evaluation

In reference to Figure 1.1, several students' environmentalism shifted after participating in a study abroad program. Focusing on the six students in this sample group, those who had Socially Concerned eco-types before the experience had the same eco-type after studying abroad. Breaking down their eco-social relationships, the experiential learning approach, such as guided hikes with FCATeros and research shadowing, in the TIERA program allowed Socially Concerned students to keep the same or higher levels of affinity. Lucy, a student with a Socially Concerned ecotype explained,

"I don't really think you can like appreciate it without like going to actually see it and like when you're walking in the forest... when you go out on a walk with [an FCATERO] and they're just pointing to all these different trees, and they know so much...I don't think it would have stuck with me as much if I wasn't hearing it from them"

In terms of their severity levels in regard to eco-logical decline, this type continued to be concerned about the social and the ecological impacts of environmental issues, which they could practically apply to the specific issues in Esmeraldas, Ecuador where the FCAT station is located. However, they expressed more feelings of hope after their study abroad experience. A student with a Socially Concerned eco-type, Chloe, told me that she felt more excited to go back to the FCAT station now that she has interacted with community members and got involved with the reforestation project. Their morality level also stayed at a similar level, with students still expressing a responsibility toward eco-social issues, especially through forms of advocacy and community-engagement. Their efficacy levels stayed the same or increased as students identified new ways to interact with the environment through their experiences. Chloe described this experience,

"I think seeing people that were connected and had emotional connections with the area doing the conservation was really cool and practical."

Northern Conservationists had similar levels of eco-social relationship qualities to the Socially Concerned, but the identifiable change in these students was their perception of environmental issues. Based on the findings above, the Northern Conservationists, including Sarah, Justin, and Spencer redefined their relationship the natural world to include social systems. These participants all come from a biological background or area of study and expressed a desire incorporate community-engagement into their research. Justin explained that he thinks about his experience at FCAT almost every day, especially at his job working for a conservation organization. All three students identified the research shadowing as the most impactful experience during their study abroad experience, and they wished they could have spent more time going into the field and observing the graduate students working with the FCATeros.

The one student who was an Eco-Disengaged eco-type showed movement toward the Socially Concerned eco-type, though not as drastically as the Northern Conservationists. Based on her interview responses and quotes above, her level of efficacy raised during the study abroad experience. This student told me that she found a way to apply her skillset to a conservation context, although she did not come from an environmental background. Her insights into the experience were unlike any other students' takeaways, and she brought my attention to cultural insights.

Although students did not participate in many community-engaged experiences, they were able to develop some level of intercultural competency. I believe that student to student interaction, along with discussions, helped students find clarity during their study abroad experience and self-reflect on their eco-social relationships.

Chapter 4: Limitations

The conclusions drawn from this study only act as a preliminary evaluation of the TIERA program and the impact study abroad can have on students' environmentalisms, providing potential research directions and questions for those who are interested in the topic and suggesting areas of improvement for the program. There are several limitations to this study that should be addressed.

This research focused on a small sample group of study abroad students, and the conclusions drawn from the data collected might not be salient across other social groups or study abroad programs. Participants knew they were being observed and evaluated for research, which means the problem of reactivity, or students modifying their speech and behavior due to the presence of a researcher (Babbie 2014), is important to consider. This research would benefit from data collection and evaluation over the course of several years to track changes in the study abroad program and its impact on students' environmentalism. Of the six students evaluated, four identified as female and two identified as male, which could influence the conclusions to be more applicable to a women's experience and relationship with the natural environment. Including a larger number and variety of student in the sample group could clarify differences in student experiences. As an undergraduate who participated in the TIERA program while collecting data, my findings could be biased toward my own experience, and including more researchers during the evaluation process would allow for a variety of perspectives to understand and analyze findings.

Some students expressed difficulty answering certain questions, especially those who had not thought critically about environmentalism or conservation before studying abroad. Especially in the pre-departure questionnaire, which relied self-reporting, students tended to give

shorter responses to abstract questions. Due to the qualitative nature of the methodology, these findings could be understood differently by other researchers. Incorporating quantitative research design could generate new findings, especially regarding students' backgrounds.

Conclusion and Discussion

After participating in a study abroad program, all students' environmentalism shifted towards a Socially Concerned eco-type. This eco-type is defined by the qualities of an individual eco-social relationship, including qualities of affinity, severity, morality, and efficacy (Kennedy 2022). The TIERA program recruited students who had similarly high levels of affinity, resulting in a study group with students who almost all felt a deep emotional connection to the environment. To differentiate students, I had to investigate the influences on that affinity, including how they perceive the "environment", and what thoughts and behaviors defined their interaction. Eco-social relationships are influenced by several discourses, frameworks, and personal experiences. In the TIERA program, these influences are present, effecting students' initial eco-type classification and determining their environmentalism shift during the study abroad experience.

In my evaluation of the TIERA students, my findings aligned with research discussing the intersection of characteristics, and how it can cause systems of inequality and privilege in an environmental context (Pellow 2018). Ana, a female student of color who grew up in an urban area expressed more feelings of uncertainty about environmental issues and was more focused on problems of racial discrimination. To her, racial issues were the more important issue to focus on because she felt its direct impact on her community, rather than the more complex and more sometimes subtle impact of climate change or other environmental issues. This was in direct contrast with Sam, a white man from the suburbs. He expressed feelings of confidence and joy when describing his experiences in the environment. He identified environmental issues as extremely important, although he didn't feel their impact on his life. These findings align with studies that show a person's characteristics, such as their gender or race, impact their experience in nature. Ana remembered doing manual labor to help her parents when she thought of her

experiences in nature, while Sam remembered visiting the Cayman Islands with his parents. During these experiences, especially throughout childhood, people develop emotions that they connect to the natural environment, and influence their eco-social relationships (Norgaard 2011, Pellow 2018).

Global discourses also influence the way people perceive and relate to the environment. The environmentalism of the Global North is one characterized by a neoliberal society that sees the natural environment as a resource, for leisure or for materials. In this framework of environmentalism, there is a nature society dichotomy that separates humans from natural systems (Guha 1997, Lewis 2021). Students in the Northern Conservationist eco-type are the most likely to understand environmentalism through this frame. However, my findings did reveal that all students in the sample group expressed thoughts or behaviors that aligned with the environmentalism of the Global North. This was exemplified when the TIERA program visited La Laguna de Cube, and all students reverted to “nature as the great outdoors”. The other framework is the “environmentalism of the poor”, a framework that interconnects social and environmental issues. Found in the Global South and within environmental justice movements, particularly in the United States, the students with a Socially Concerned ecotype were more likely to utilize this this framework in their perceptions of and relationships with the natural environment. These frameworks came into conflict in the context of the TIERA program because the perspectives of the environmentalism in the Global North were engrained in the development of study abroad experiences, but the goals of the program are more aligned with the perspectives found in the “environmentalism of the poor”. This caused students to expect certain outcomes from the study abroad experiences, and in many cases, they were confused about the outcomes of the programming, which impacted their view of conservation, community-engaged scholarship,

and perception of environmentalism. To counteract this issue, student should be made aware of what constitutes as community-engagement and how they can spot it in many different contexts. Not only will this strengthen students' eco-social relationships because they will be aware of the conceptual model for "ethical" scholarship and conservation, but they will also be able to identify community-engagement, or a lack thereof, in higher education or study abroad structures.

To achieve this understanding, students should follow several steps to achieve effective community-engagement that develop intercultural competence that is long-lasting and interdisciplinary. Tammy Lewis describes strategies that can be employed, especially for short term study abroad program that last less than a semester (2005). First, research projects should be connected to on-campus student coursework, allowing them to gain context and insight into the community and the abroad experience and to develop the skills needed to promote positive experiences during study abroad. When students are given allocated time to develop language and skills, they create stronger projects that are more community-based (Lewis 2005). When it comes to language skills, it is not necessary for TIERA program students to be fluent in Spanish, but many students told me they wished there were built in Spanish lessons before going to Ecuador. The students who were able to speak advanced Spanish were more likely to create connection with local community members, while the students who knew very little Spanish found conversation, and therefore connection, to be difficult.

Research skills can include library and database education and understanding, the ability to effectively interpret data, developing data collection tools, such as surveys, and specific research techniques, depending on the student's area of study (Lewis 2005). When students are exposed to and learn these skills before they begin to create their own research project, they have the

foundation to create well-founded research designs. Although the TIERA program students were not engaging in their own research during this visit, they were observing and engaging with other researchers. Having the background knowledge about project creation, development, and implementation would promote deeper understanding of conservation in this specific context of conservation NGO in the Chocó Rainforest. In addition, courses should center interdisciplinary research skills, teaching students about quantitative and qualitative methods. When students begin to develop a project focused on specific subject or problem, they should address it using more than one approach (Lewis 2005). For example, a biology student studying palms using ecological sampling should also survey community members to better understand their knowledge of the native trees in the area. This interdisciplinary approach encourages every student to consider the social aspects of conservation and roots research projects in community-engaged scholarship.

Community service learning on campus can also be effective in introducing and developing community-engaged scholarship in students (Lewis 2005, Ogden 2021). Many students have not experienced environmental issues, such as deforestation or water pollution in the real world, and their only understanding comes from formal education in the classroom. When students do community-engagement in a volunteer or service setting along with a research setting, they are more likely to view community members as a part of the ecosystem they are trying to understand and ultimately protect (Lewis 2005). Students should also be given structured time before the study abroad experience to critically reflect on topics that will prepare them to enter communities. Reflecting on personal identity, on perception of a foreign place and people, and on collaboration in a study abroad setting allows students to analyze their own positioning as a visitor and researcher. They begin to think critically about preconceptions they

might hold and begin to question those notions. Beginning this process before students arrive in a foreign space can promote open-mindedness in students as they study abroad.

As the program coordinator of the TIERA program build and strengthen the study abroad experience, they have recently begun to incorporate these methods, such as implementing co-curriculum and introducing community service learning for students. The earlier that students are introduced to the skills and opportunities listed above, the more likely they are to develop intercultural competence during a study abroad experience. Study abroad organizers must balance students' comfortability with positive outcomes in the community, and these integrated experiences on campus would strengthen both by increasing students' experience and confidence interacting with community members and promoting projects that center community well-being.

Based on the research that defines community-engagement and the organizations who ascribe to the conceptual model (McCloskey 2013), the TIERA program is not yet a community-engaged program. It does have some aspects of community engagement, such as workshops in collaboration with the FCATeros, but most of the student experiences reproduce unequal power dynamics between foreign students and local community members. Students were aware of this aspect of their study abroad program, but they had difficulty verbalizing this fact. Firstly, students were unclear on the characteristics that make up a community-engaged program, and they were not sure how to describe some of their experiences at FCAT. When students visited the reforestation plot, they noticed the collaboration between foreign researchers and local community members, which they described as a positive aspect of the project, but many students noticed that foreign researchers were making conceptual or methodological decisions, sometimes from an offsite location, while the FCATeros did the manual work of preparing the plot and planting the seedlings. This caused students to question why local community members weren't

developing the research methodology because so many students experienced the traditional ecological knowledge that many FCATeros possess.

Although students' environmentalism shifted, there were aspects of the study abroad program that reinforced the Northern Conservationist eco-type as well as other experiences that caused disillusionment and confusion in students as they analyzed their own environmentalism. As social structures, study abroad and higher education have not escaped the colonialist history that impact their organizational structure and processes today (Jones, 2019, Ogden 2007). The TIERA program is not exception, still influenced these systems. To break away from these systems, the program directors and professors should reevaluate the on-site programming to incorporate more comprehensive, community-engaged experiences.

Students' environmentalisms, or eco-types, were able to shift due to certain aspects of the short-term study abroad, such as shadowing researchers who were participating in community-engaged research. One aspect where the TIERA program can improve is by fostering more interaction between students and community members. In Ogden's article about "colonial students", he describes students who can stay comfortable in a new environment by creating "buffer zones" between themselves and other cultures or community members (2007, 2021). In my observations of the cohort, I noticed some students who were engaging with local residents or FCATeros and some who were keeping their distance. By including more activities where FCATeros and students interact, in formal and informal settings, the TIERA program will cultivate meaningful intercultural competency.

My findings suggest that student's environmentalisms can change, even when they are faced with conflicting frameworks. For many students, they used situations where they identified an experience as not community-engaged and a framework of "what not to do". The issue with

this is students are only learning what they shouldn't do while interacting with community members, not what they should do. Predeparture activities that incorporate intercultural competency activities, as mentioned above, could give students guidelines for how to enter a community.

Most students understood environmentalism as caring about the earth or nature but could not elaborate on its meaning. This could point to the issue of defining the word "environment" because it encapsulates so many aspects of a biotic and biotic life, confusing students (Schnaiberg 1980). But if the goal of study abroad programs in environmental fields of study, such as the TIERA program, is to introduce students to new conceptual frameworks that contextualize environmental solutions, they should first understand student's educational and environmental background. This also applies to other terms, such as "community engagement" and "sustainability".

Students can think critically about their eco-social relationships and investigate what emotions, experiences, and frameworks are influencing their perception and interaction with the natural environment. Many students told me in post-field interviews that they wished they could have had more time to develop relationships with FCATeros and observe the research projects happening at the station, which speaks to the downfalls of short term study abroad (Lewis 2005, Geyer 2017). In the TIERA program, students conveyed more hopeful emotions towards environmental problems and solutions after participating, and five of the six students have expressed interest in returning to the FCAT station to do conservation research. However, interacting with community members and staying for long period at the research station is not enough; the TIERA program organizers should begin to break down power dynamics that are persistent in our social structures, especially when they derive from the Global North. If this

relatively small introduction to community-engagement had this impact on students' environmentalism, then I believe the TIERA program has the potential to effect real change in student's environmentalism and intercultural competency in Ecuador.

References

- Alexander, Steven M., Mark Andrachuk, and Derek Armitage. 2016. "Navigating Governance Networks for Community-Based Conservation." *Frontiers in Ecology and the Environment* 14(3):155–64. doi: [10.1002/fee.1251](https://doi.org/10.1002/fee.1251).
- Anderson, Sarah E. 2011. "Complex Constituencies: Intense Environmentalists and Representation." *Environmental Politics* 20(4):547–65. doi: [10.1080/09644016.2011.589579](https://doi.org/10.1080/09644016.2011.589579).
- Anon. n.d. "Fundación Para La Conservación De Los Andes Tropicales." *FCAT Ecuador*. (<https://fcatecuador.org/>).
- Behrnd, Verena, and Susanne Porzelt. 2012. "Intercultural Competence and Training Outcomes of Students with Experiences Abroad." *International Journal of Intercultural Relations* 36(2):213–23. doi: [10.1016/j.ijintrel.2011.04.005](https://doi.org/10.1016/j.ijintrel.2011.04.005).
- Brockington, Dan., Rosaleen. Duffy, and Jim. Igoe. 2012. *Nature Unbound Conservation, Capitalism and the Future of Protected Areas*. Hoboken: Taylor and Francis. Print.
- Browne, Luke, and Jordan Karubian. 2016. "Diversity of Palm Communities at Different Spatial Scales in a Recently Fragmented Tropical Landscape." *Botanical Journal of the Linnean Society* 182(2):451–64. doi: [10.1111/boj.12384](https://doi.org/10.1111/boj.12384).
- Caruana, Viv, and Catherine Montgomery. 2015. "Understanding the Transnational Higher Education Landscape: Shifting Positionality and the Complexities of Partnership." *Learning and Teaching* 8(1):5–29. doi: [10.3167/latiss.2015.080102](https://doi.org/10.3167/latiss.2015.080102).
- Chakraborty, Rahul. 2017. "A Short Note on Accent–Bias, Social Identity and Ethnocentrism." *Advances in Language and Literary Studies* 8(4):57. doi: [10.7575/aiac.all.v.8n.4p.57](https://doi.org/10.7575/aiac.all.v.8n.4p.57).

- Core, Rachel S. 2017. "Assessing Global Learning in Short-Term Study Abroad: Population, Environment, and Society in Shanghai." *Teaching Sociology* 45(4):399–408. doi: [10.1177/0092055X17728555](https://doi.org/10.1177/0092055X17728555).
- De Aquino, Karina Kethelen Silva, Fabricio Beggiato Baccaro, Giulliana Appel, Augusto Loureiro Henriques, Paulo Estefano Dineli Bobrowiec, and Sérgio Henrique Borges. 2022. "Forest Fragments, Primary and Secondary Forests Harbour Similar Arthropod Assemblages after 40 Years of Landscape Regeneration in the Central Amazon." *Agricultural and Forest Entomology* 24(2):178–88. doi: [10.1111/afe.12481](https://doi.org/10.1111/afe.12481).
- Di Pietro, Giorgio. 2022. "Changes in the Study Abroad Gender Gap: A European Cross-country Analysis." *Higher Education Quarterly* 76(2):436–59. doi: [10.1111/hequ.12316](https://doi.org/10.1111/hequ.12316).
- Dunlap, Riley E. 1992. "Sociology 532 Environmental Sociology." *Environmental History Review* 16(1):55–63. doi: [10.2307/3985020](https://doi.org/10.2307/3985020).
- Dwyer, Mary M. 2004. "More Is Better: The Impact of Study Abroad Program Duration." *Frontiers: The Interdisciplinary Journal of Study Abroad* 10(1):151–64. doi: [10.36366/frontiers.v10i1.139](https://doi.org/10.36366/frontiers.v10i1.139).
- Fraj, Elena, and Eva Martinez. 2007. "Ecological Consumer Behaviour: An Empirical Analysis." *International Journal of Consumer Studies* 31(1). doi: [10.1111/j.1470-6431.2006.00565.x](https://doi.org/10.1111/j.1470-6431.2006.00565.x).
- Fraj, Elena, and Eva Martinez. 2007. "Ecological Consumer Behaviour: An Empirical Analysis." *International Journal of Consumer Studies* 31(1). doi: [10.1111/j.1470-6431.2006.00565.x](https://doi.org/10.1111/j.1470-6431.2006.00565.x).
- Freudenburg, William R. 1991. "Rural-Urban Differences in Environmental Concern: A Closer Look." *Sociological Inquiry* 61(2):167–98. doi: [10.1111/j.1475-682X.1991.tb00274.x](https://doi.org/10.1111/j.1475-682X.1991.tb00274.x).
- Geyer, Alexis, Jenni Putz, and Kaustav Misra. 2017. "The Effect of Short-Term Study Abroad Experience on American Students' Leadership Skills and Career Aspirations." *International Journal of Educational Management* 31(7):1042–53. doi: [10.1108/IJEM-10-2016-0203](https://doi.org/10.1108/IJEM-10-2016-0203).

- Guha, Ramachandra, and Joan Martínez Alier. 2013. *Varieties of Environmentalism*. 0 ed. Routledge.
- Hale, Brack W. 2021. “Educating for the Environment: The Role of the Host Destination in Education Travel Programs.” *Sustainability* 13(15):8351. doi: [10.3390/su13158351](https://doi.org/10.3390/su13158351).
- Harrison, Jill L. 2021. “Environmental Social Movements .” Pp. 329–47 in *Twenty Lessons in Environmental Sociology*. New York: Oxford University Press.
- Hess, David J., and Brandi M. Collins. 2018. “Climate Change and Higher Education: Assessing Factors That Affect Curriculum Requirements.” *Journal of Cleaner Production* 170:1451–58. doi: [10.1016/j.jclepro.2017.09.215](https://doi.org/10.1016/j.jclepro.2017.09.215).
- Jones, Alexander H., James Huff, Mandy Kellums Baraka, and Laura S. Meitzner Yoder. 2019. “A Pedagogy of the Parochial: Pedagogical Imperialism and Mutual Accompaniment in Christian Higher Education.” *Christian Higher Education* 18(1–2):125–41. doi: [10.1080/15363759.2018.1542905](https://doi.org/10.1080/15363759.2018.1542905).
- Kanchanapibul, Maturros, Ewelina Lacka, Xiaojun Wang, and Hing Kai Chan. 2014. “An Empirical Investigation of Green Purchase Behaviour among the Young Generation.” *Journal of Cleaner Production* 66:528–36. doi: [10.1016/j.jclepro.2013.10.062](https://doi.org/10.1016/j.jclepro.2013.10.062).
- Kearns, Laurel. 1996. “Saving the Creation: Christian Environmentalism in the United States.” *Sociology of Religion* 57(1):55. doi: [10.2307/3712004](https://doi.org/10.2307/3712004).
- Kempton, Willitt, Boster, J. S., & Hartley, J. A. 1999. *Environmental values in American culture*. MIT Press.
- Kennedy, Emily H., and Parker Muzzerall. 2022. “Morality, Emotions, and the Ideal Environmentalist: Toward A Conceptual Framework for Understanding Political Polarization.” *American Behavioral Scientist* 66(9):1263–85. doi: [10.1177/00027642211056258](https://doi.org/10.1177/00027642211056258).

- Kennedy, Emily. 2022. *Eco-types : five ways of caring about the environment*. Princeton University Press.
- Kenny, John. 2019. “Environmentalism Undercover: The Environmental Dimension of Public Support for Domestic Water Charges.” *Electoral Studies* 62:102088. doi: [10.1016/j.electstud.2019.102088](https://doi.org/10.1016/j.electstud.2019.102088).
- Kidman, Joanna. 2019. “Whither Decolonisation? Indigenous Scholars and the Problem of Inclusion in the Neoliberal University.” *Journal of Sociology* 56(2):247–62.
- Laurance, William F., José L. C. Camargo, Regina C. C. Luizão, Susan G. Laurance, Stuart L. Pimm, Emilio M. Bruna, Philip C. Stouffer, G. Bruce Williamson, Julieta Benítez-Malvido, Heraldo L. Vasconcelos, Kyle S. Van Houtan, Charles E. Zartman, Sarah A. Boyle, Raphael K. Didham, Ana Andrade, and Thomas E. Lovejoy. 2011. “The Fate of Amazonian Forest Fragments: A 32-Year Investigation.” *Biological Conservation* 144(1):56–67. doi: [10.1016/j.biocon.2010.09.021](https://doi.org/10.1016/j.biocon.2010.09.021).
- Lewis, Tammy L., and Richard A. Niesenbaum. 2005. “Extending the Stay: Using Community-Based Research and Service Learning to Enhance Short-Term Study Abroad.” *Journal of Studies in International Education* 9(3):251–64. doi: [10.1177/1028315305277682](https://doi.org/10.1177/1028315305277682).
- Lewis, Tammy L. 2021. “Environmental Movements in the Global South.” Pp. 348–64 in *Twenty Lessons in Environmental Sociology*. New York: Oxford University Press.
- Martínez, Alier. 2002. *The environmentalism of the poor : a study of ecological conflicts and valuation*. Edward Elgar Pub.
- McCloskey, Donna J., McDonald, Mary. A., & Cook, Jennifer. 2013. “Community engagement: Definitions and organizing concepts from the literature”. Retrieved from http://www.atsdr.cdc.gov/community_engagement/pdf/PCE_Report_Chapter_1_SHEF.pdf

- Norgaard, Kari M.. (2011). *Living in denial climate change, emotions, and everyday life*. MIT Press.
- Office of Study Abroad. n.d. “TIERA Program: Field Course.” *Center for Global Education, Tulane University* .
(<https://studyabroadprograms.tulane.edu/index.cfm?FuseAction=Programs.ViewProgramAngular&id=10224>).
- Ogden, Anthony, Streitwieser, Bernhard, Van Mol, Christof. 2021. *Education Abroad: Bridging Scholarship and Practice*. Abington, Oxon: Routledge
- Ogden, Anthony. 2007. *The view from the veranda*. *Frontier*, 15, 35-55
- Ojala, Maria. 2007. “Hope and Worry: Exploring Young People’s Values, Emotions, and Behavior Regarding Global Environmental Problems.” *Örebro University*: Örebro, Sweden.
- Pellow, David N. 2018. *What is Critical Environmental Justice?* Medford, MA: Polity Press.
- Perlin, Liat. 2023. “Reciprocal Scholarship in the Ecuadorian Rainforest: Reflections on a Research-focused Conservation Model” PowerPoint presentation.
https://docs.google.com/presentation/d/1khnPXm9egpmaL4p_RAvDN2soBK2s0SQfqj83uzkoME/edit?usp=drive_web&oid=106147664678486088960
- Pretty, Jules. 2003. “Social Capital and the Collective Management of Resources.” *Science* 302(5652):1912–14. doi: [10.1126/science.1090847](https://doi.org/10.1126/science.1090847).
- Schnaiberg, Allan & Gould, Kenneth. A. (1994). *Environment and society: the enduring conflict*. St. Martin’s Press.
- Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. New York: Oxford University Press.

- Stein, Sharon. 2019. "The Ethical and Ecological Limits of Sustainability: A Decolonial Approach to Climate Change in Higher Education." *Australian Journal of Environmental Education* 35(3):198–212. doi: [10.1017/ae.2019.17](https://doi.org/10.1017/ae.2019.17).
- Suspitsyna, Tatiana. 2021. "Internationalization, Whiteness, and Biopolitics of Higher Education." *Journal of International Students* 11(S1):50–67. doi: [10.32674/jis.v11iS1.3843](https://doi.org/10.32674/jis.v11iS1.3843).
- Swedberg, Richard. 2018. "How to Use Max Weber's Ideal Type in Sociological Analysis." *Journal of Classical Sociology* 18(3):181–96. doi: [10.1177/1468795X17743643](https://doi.org/10.1177/1468795X17743643).
- Takeuchi, Yayoi, Ryoji Soda, Bibian Diway, Tinjan ak. Kuda, Michiko Nakagawa, Hidetoshi Nagamasu, and Tohru Nakashizuka. 2017. "Biodiversity Conservation Values of Fragmented Communally Reserved Forests, Managed by Indigenous People, in a Human-Modified Landscape in Borneo" edited by R. Zang. *PLOS ONE* 12(11):e0187273. doi: [10.1371/journal.pone.0187273](https://doi.org/10.1371/journal.pone.0187273).
- Taylor, Dorceta E. 2016. *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection*. Duke University Press.
- Taylor, Dorceta E. 2019a. "College Students and Nature: Differing Thoughts of Fear, Danger, Disconnection, and Loathing." *Environmental Management* 64(1):79–96. doi: [10.1007/s00267-019-01172-9](https://doi.org/10.1007/s00267-019-01172-9).
- Taylor, Dorceta E. 2019b. "College Students and Nature: Differing Thoughts of Fear, Danger, Disconnection, and Loathing." *Environmental Management* 64(1):79–96. doi: [10.1007/s00267-019-01172-9](https://doi.org/10.1007/s00267-019-01172-9).
- Thirolf, Kathryn Q. 2014. "Male College Student Perceptions of Intercultural and Study Abroad Programs." *Journal of Student Affairs Research and Practice* 51(3):246–58. doi: [10.1515/jsarp-2014-0026](https://doi.org/10.1515/jsarp-2014-0026).

- Tompkins, Amanda, Trevor Cook, Emily Miller, and Lucy A. LePeau. 2017. "Gender Influences on Students' Study Abroad Participation and Intercultural Competence." *Journal of Student Affairs Research and Practice* 54(2):204–16. doi: [10.1080/19496591.2017.1284671](https://doi.org/10.1080/19496591.2017.1284671).
- Van Mol, Christof. 2022. "Exploring Explanations for the Gender Gap in Study Abroad: A Case Study of the Netherlands." *Higher Education* 83(2):441–59. doi: [10.1007/s10734-020-00671-7](https://doi.org/10.1007/s10734-020-00671-7).
- Weber, Max. 2019. *Economy and Society: A New Translation*. Harvard University Press.

Appendices

Appendix A

TIERA Program Initial Questionnaire

- 1) What is your gender?
- 2) What is your race or ethnicity?
- 3) Classification?
 - a) Freshmen
 - b) Sophomore
 - c) Junior
 - d) Senior
 - e) Graduate Student of Tulane
 - f) Graduate Student of a University that is not Tulane
- 4) Are you a part of the TIERA program?
 - a) Yes
 - b) No
- 5) What is your area of study?
- 6) Where were you born (City, State, Country)?
- 7) Have you traveled to Ecuador before?
 - a) Yes
 - b) No
- 8) Have you traveled to FCAT before?
 - a) Yes
 - b) No
- 9) Have you lived in a community of a lower socioeconomic status than your own (2 weeks or more)?
 - a) Yes
 - b) No
- 10) How has your socioeconomic status changed within your lifetime?

- 11) How would you describe where you grew up, and how did you interact with it (Rural/Urban/Suburban, Walking/Biking/etc.)?
- 12) What is your relationship with nature today?
- 13) Select the degree to which you agree with the statement: The neighborhood I grew up in has enough green space.
- a) Strongly Agree
 - b) Agree
 - c) Neutral
 - d) Disagree
 - e) Strongly Disagree
- 14) Select the degree to which you agree with the statement: I was able to easily access everything in my community.
- a) Strongly Agree
 - b) Agree
 - c) Neutral
 - d) Disagree
 - e) Strongly Disagree
- 15) Select the degree to which you agree with the statement: I am satisfied with where I grew up and the resources it had.
- a) Strongly Agree
 - b) Agree
 - c) Neutral
 - d) Disagree
 - e) Strongly Disagree
- 16) Select the degree to which you agree with the statement: I can learn from the Ecuadorians that live within and outside of the FCAT reserve.
- a) Strongly Agree
 - b) Agree
 - c) Neutral
 - d) Disagree
 - e) Strongly Disagree

- 17) How do you imagine the environment and the local people of Ecuador and FCAT?
- 18) Describe the role you believe Ecuadorians play in conserving the Chocó Rainforest?
- 19) Describe the role you believe Ecuadorians play in the destruction of the Chocó Rainforest?
- 20) Describe the role you believe foreigners play in conserving the Chocó Rainforest?
- 21) Describe the role you believe foreigners play in the destruction of the Chocó Rainforest?
- 22) What words come to mind when you hear the term conservation?
- 23) What do you envision as the ideal relationship between humans and the natural world? Or what role do humans play in the viability of natural systems?
- 24) How are you feeling about the trip right now (emotionally, spatially)?
- 25) What do you still wish to know before departing for Ecuador?

Appendix B:

Interview Guides: Pre and Post Field

Introduction

- Name:
- What is your area of study (major, area of focus)?
 - Why did you choose this major?

Upbringing

- Where did you grow up, and how would you describe the surrounding environment?
 - (If they grew up in different places) Were there differences in the places where you grew up?
- What was your initial introduction to nature?
 - What was your first interaction/memory from your childhood with nature?
 - Who/what encouraged you to engage with nature?
- Religious background
 - Was religion or spirituality part of your life growing up, and if so how?
 - Was there anything about your religious or spiritual upbringing that influenced your relationship with nature?

Motivation for Participating in Ecuador Scholars Program

- Coming to the field station
 - How did you learn about the Ecuador Scholars program?

- What initially piqued your interest?
- Why did you apply for the Ecuador Scholars program?
- How does the program relate to your major?
- Is this your first visit?
- What do you hope to gain during this visit at the field station?
- Expectation for staying at the field station
 - Before getting here, what did you expect the station to look like?
 - What did you expect the surrounding area to look like?
 - What do you expect the stay to be like now?
 - What emotions or feelings do you have towards the trip as of now?

Perceptions about Ecuadorians relationship with the environment

- What did you know about Ecuador as a country before arriving?
 - What would you be curious to find out or learn more?
 - Do you know anything about the Ecuadorian economy?
 - (If yes) tell me more. (If no) what do you imagine?
- Do you have any idea about how people from the surrounding communities make a living?
 - (If yes) tell me more. (If no) What do you assume about how locals from the surrounding communities make a living?
- Were you aware that FCAT employs local community members for its conservation projects?
 - (if yes) Do you know what projects they are working on? (if no)

Perception of self-relationship to environment

- When do you engage with the environment in your everyday life?
 - What do you picture when you hear the word environment? What do you picture when you hear the word nature?
- What environmental problems do you care about?
 - Why are these issues important to you?
 - What do you think causes these environmental problems?
 - Do you think these environmental problems impact you or your community and if so, how?

- Has knowing about this/these problems changed your daily life?
 - What role do you think you play in contributing to these problems? (in general, not at FCAT)
 - How do you **feel** about climate change? [emotions]
 - How do you deal with those emotions?
- What do you think are potential solutions to the environmental problems you mentioned?
 - (if they say sustainability) (this can apply to others: mutually beneficial relationship, pristine wilderness, etc) What do you mean by that? What is an example of a sustainable solution that you've seen or learned about?
 - What role do you play in contributing to these solutions?

Perceptions about Conservation

- FCAT means (Fundación para la Conservación de los Andes Tropicales) What do you think conservation means?
- What do you think about environmental protection in general?
 - Who should we protect the environment for?
- What do you think **our role** is in caring for the environment? [who is our/we?]
 - What do you think the role of foreign researchers is in conserving the Chocó rainforest?

Environmentalism

- What do you think environmentalism is?
- Do you consider yourself an environmentalist?
- Are you aware of any environmental social movement?
 - Do you take part in any environmental SM?
- Do you think caring about the environment is a privilege for a few?
 - Who do you think is most responsible for caring for the environment?
- What do you think are the main social problems of our times?
- Do you see social and environmental problems connected in any way? If so, how?
- Do you see solutions to social and environmental problems connected in any way? If so, how?
- Do you take part in any kind of social movement or community organizing or clubs at all that aim to address any of the issues you care about?

Demographics

- What gender do you identify with?
 - What are your pronouns?
- What's your age?
- Besides attending school, do you have a job?
 - If yes, what do you do? How many hours a week? What's the hourly rate?
- About your family,
 - Who makes up your immediate family?
 - What do your [parents] do for a living?
 - Do you have any idea of your family's annual income?
 - Just a ballpark
 - Would you say your family's socioeconomic status is that of
 - Working class
 - Middle
 - Upper class
- Is there anything else you want to add?

Post-Field Interview Guide: Ecuador Scholars

Initial Takeaways

- How would you describe how you felt leaving the station and returning home?
- After spending time at FCAT, have your ideas about conservation changed/been affirmed/shifted? If yes, how so?
- Do you feel confident about describing what FCAT does to help conserve the rainforest? If yes, can you describe it?
 - Do you feel confident describing what the TIERA program is? If so, can you give me the "elevator pitch"?
- Did you notice any change in the way you perceived your surroundings when you returned to the US? If yes, what did you notice?

Specifics

- What did you gain from the visit to the Afro Ecuadorian community?

- Did you have any preconceived notions going in? Did your attitude change once you arrived?
- What did you learn from your visit?
- Do you remember what you learned about the FCATeros projects?
 - Which project was most interesting to you? Why?
 - What do you think is the significance of learning about local community members' projects?
- What details do you remember from the visit to Don Gavilan's property?
 - What did you find interesting, if anything, about his use for his land?
 - What similarities did you see between FACT and Don Gavilan's conservation? What differences?
 - What knowledge or information did you gain during this visit?
- What were some of the takeaways you had from the workshops the Ecuador Scholars had throughout the visit at FCAT?
 - Did you find these workshops helpful?
 - Did they help you contextualize your own studies in the setting of FCAT?
- How did you feel about the meetings with the Scholars and the FCATeros?
 - What did you learn from the FCATeros during these meetings?
 - Do you think these meetings were important? Why?
- What concrete research experience (specifically) did you gain, or not gain, while at the FCAT station?

Lasting Impacts

- What was a moment that impacted you/stayed with you from your visit to the station? Why did this moment stick with you?
- Has interacting with the FCAT workers benefited your studies, and in what ways?
- Do you think your visit impacted the FCAT station? If so, in what ways?
- How would you describe the interaction between the people at FCAT (with the Ecuador Scholars students)?
- Could the interaction be improved?

- What was something you wish you could have experienced during the trip that did not occur?
 - How can the Scholars program improve in the future?

Connection to NOLA

- Do you see connections between environmental issues in Ecuador and in New Orleans? What about solutions? If yes, what connections?
- Do you think you learned any skills in your visit to the station? If yes, do you think those skills are applicable for dealing with environmental issues in New Orleans?

Demographic questions

- Do you receive any form of scholarship at Tulane?
- Merit
- Merit, needs, nominated scholarship
- Academic scholarship
- Do you plan to return to the FCAT station next summer? If yes, what are you planning to do at the station?