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# Transformative Learning in Nicaragua: A Retrospective Analysis of University Agriculture Students' Long-Term Changes in Perspective After a Study Abroad Course

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**Abstract**

*Study abroad courses have become a priority for institutions of higher education because of a need to broaden students' perspectives of the world. However, a dearth of knowledge existed regarding whether the reported outcomes of study abroad courses, such changes to students' perspectives, endure over time. In response, this retrospective study explored how university agriculture students' (n = 5) shared experiences during a one-week study abroad course to Nicaragua influenced their long-term changes in perspective after returning to the U.S. in 2018. Through our phenomenological analysis, three themes emerged: (1) dichotomous learning outcomes, (2) recognition of power and privilege, and (3) advocacy for global experiences. In the first theme, dichotomous learning outcomes, participants' long-term changes in perspective appeared to vary based on their level of academic maturity. Meanwhile, in the second theme, as university agriculture students compared their lived experiences in Nicaragua to their existing assumptions of the U.S., it appeared to elicit powerful shifts concerning how they viewed the world. And, as a result, they reported their experiences prompted them to consider the implications of social inequities more deeply. In the final theme, participants reported that after returning home, they began to advocate for global experiences among their peers, family, and friends. Consequently, our findings supported the use of short-term study abroad courses to foster a positive transformation in students' global perspectives and behaviors after returning to the U.S.*

**Keywords:** agricultural education, study abroad, phenomenology, retrospective long-term change

## Introduction

A shift has occurred in recent decades by which the world has become more globally interconnected. Institutions of higher education have responded by championing study abroad courses as a way to help graduates become more culturally, professionally, and socially prepared to navigate this new reality that is fraught with increasingly complex problems (Blake-Campbell, 2014; Boli & Petrova, 2008; McCabe, 2001; Ogden, 2007; Reilly & Senders, 2009). The Forum of Education Abroad (2011) defined study abroad as "...an education abroad enrollment option designed to result in academic credit" (para. 1). When designing study abroad courses, a number of approaches must be evaluated to determine their relative strengths and weaknesses before making critical decisions on the curriculum, duration, and format type (McCabe, 2001). Examples of study abroad approaches include (a) faculty-led courses, (b) international service-learning, (c) language-focused programs, (d) student exchange programs, and (e) others. However, faculty-led study abroad courses remain the most popular option. Schlarb (2019) defined these experiences as:

...faculty-designed and delivered study abroad courses for which students earn credit. In the context studied, they are typically of shorter duration than traditional, semester-long study abroad programs, taking place over the course of one to six weeks. In these courses, faculty guide students as they study specific course content, undertake field research, or participate in applied learning practicums or internships. (p. 8)

In 2020, the COVID-19 pandemic created a massive shift in the global landscape. However, in the three years leading up to the pandemic, study abroad course offerings had increased by more than 2.3% (Institute of International Education (IIE), 2020). A number of researchers credit the rise in international experiences to students' interest and willingness to participate in short-term study abroad experiences (Donnelly-Smith, 2009; Mapp, 2012; Tarrant & Lyons, 2012; Wang et al., 2011). It should also be noted, however, that institutions of higher education have used short-term study abroad courses to respond to employers who report they value employees who have previously participated in an international experience (Stroud, 2010). Such trends have given rise to international experiences that last two weeks or less, which are more cost effective for students and, therefore, more assessable (Donnelly-Smith, 2009).

Because of the lower cost and convenience of short-term study abroad courses, students from more diverse socioeconomic backgrounds and other demographic minorities have a greater opportunity to participate (Tucker et al., 2011). Consequently, more university graduates are now entering the workforce with a deeper understanding of empathy, geopolitics, food insecurity, sustainability, and water scarcity (Hartman & Kiely, 2014). The broader literature on study abroad has also identified several additional benefits for students such as improved: (a) capacity for global citizenship, (b) intercultural tolerance and competence, (c) career exploration and professional advancement, (d) personal and emotional growth, and (e) self-identity (Reilly & Senders, 2009; Schlarb, 2019; Taylor & Rivera, 2011). As a result, short-term study abroad courses have emerged as a critical approach to fostering university students' personal and professional development and have become central to the university experience (Blake-Campbell, 2014; Seifen et al., 2019), especially for colleges of agriculture.

As an illustration, colleges of agriculture have been tasked with producing graduates prepared to navigate complexities involving food, fiber, and natural resources that span borders across the globe (Alston et al., 2019, 2020). Therefore, graduates should be culturally competent and equipped with the ability to address complex problems (Lewis & Gibson, 2008; National Association of State and Land-Grant Colleges [NASULGC], 2004). So far, evidence on study

abroad courses in agriculture has documented the motivations and barriers of university agriculture students' participation (Raczkoski et al., 2018; Roberts et al., 2020b, 2020c). On this point, Raczkoski et al. (2018) reported that university agriculture students were largely intrinsically motivated to participate in study abroad courses; however, the perceived cost of the experience and its relative value also influenced their decisions. In response, Roberts et al. (2020a) created a profile of agriculture majors' motivations to participate in a study abroad course that included students that were: (1) goal-oriented, (2) social-oriented, and (3) learning-oriented. As a result, faculty and other decision-makers now have a better understanding of how to design and deliver study abroad courses to support university agriculture students underlying motivations (Roberts et al., 2020a).

The literature in agriculture has also explored the short-term impacts and best practices of study abroad courses (Bunch et al., 2018; Conner et al., 2019; Conner & Roberts, 2015; Dobbins et al., 2019, 2020; Lamm et al., 2011; O'Malley et al., 2019; Roberts & Edwards, 2016, Roberts et al., 2020a, 2020b; Rodriguez & Roberts, 2011). During short-term study abroad courses, existing evidence has demonstrated that students can begin to reexamine their lifestyle, beliefs, attitudes, and behaviors (Dobbins et al., 2019, 2020; O'Malley et al., 2019; Roberts & Edwards, 2016, Roberts et al., 2020a). Despite this progress, the *value* and *validity* of short-term study abroad courses have consistently been called into question (Tarrant & Lyons, 2012). Common critiques of short-term experiences include: (a) a lack of immersion into the local culture, (b) little exposure to customs and traditions of the host country, and (c) only marginal understandings of complex issues and problems such as gendered norms, racial bias, and other dynamics of power (Vanden Berg & Schwander, 2019). As a consequence, a need emerged to better understand whether the reported outcomes, such as changes to students' perspectives, of study abroad courses endure over time.

### Theoretical Framework

Mezirow's (1991, 2000) transformational learning theory (TLT) served as the theoretical lens used to interpret this study's findings. TLT describes how individuals ascribe meaning to their lived experiences, which has been theorized to influence important *changes in perspective* on issues and topics (Clark, 1993; Kiely, 2004, 2005). Or, as Perry et al. (2012) explained: "fundamentally, TLT is concerned with not only the experience a learner has, but how they interpret and explain what happens" (p. 691). Mezirow (1991) advocated for the use of TLT to interpret how individuals construct meaning after exposure to a disorienting experience that provokes them to call into question their underlying beliefs and values – a notion called dissonance. Mezirow (2000) conjectured that *exposure to* and the meaning *derived from* dissonance could lead to an individual's perspective being altered. As such, Mezirow (1991, 2000) called for individuals to reflect on their lived experiences critically; a practice that has been shown to initiate a powerful process by which transformational learning occurs (Mezirow, 1991). Because of the learner-centered nature of Mezirow's (1991, 2000) theory, transformational learning has become central to interpreting the experiences of students abroad.

Previous evidence has demonstrated the transformative potential of study abroad courses in agriculture (Dobbins et al., 2019; Hainline et al., 2018; O'Malley et al., 2019; Roberts & Edwards, 2016; Roberts et al., 2020a). However, the outcomes of such transformations appear to have ranged considerably in the literature. In response, O'Malley et al. (2019) reported that to foster transformative learning, experiences abroad should be designed to introduce university agriculture students to dissonance that allows them to critically reflect and derive meaning. For

instance, during a study abroad course to Nicaragua, students encountered four forms of dissonance – environmental, sociocultural, intellectual, and personal – that influenced the transformation in perspectives that students endured (O'Malley et al., 2019). However, in a comparison of the dissonance experienced by agriculture majors during international experiences to Costa Rica and Thailand, Pigg et al. (2020) argued the dissonance students encountered appeared to be influenced by the context and duration of their study abroad course, which provided deeper insight into why students may experience variant shifts in perspectives in literature. Although some previous work (Roberts & Edwards, 2015, 2016) has explored whether these transformations are integrated into students' lives after returning home, more knowledge is needed to distill the long-term outcomes of study abroad courses. As such, data from this study served as a follow-up to an investigation on students' experiences during a study abroad course to Nicaragua to document how such resulted in long-term shifts in how they approached their daily lives (O'Malley et al., 2019).

### **Purpose, Research Question, and Significance of the Study**

The purpose of this retrospective study was to explore how university agriculture students' shared experiences during a one-week study abroad course to Nicaragua influenced their long-term changes in perspective after returning to the U.S. in 2018. Because of this investigation's emphasis on students' long-term outcomes, findings could be used to inform study abroad programming and better prepare agriculture majors to thrive in the global workforce (Harder et al., 2015). One research question guided the investigation: What was the essence of university agriculture students' lived experiences regarding their long-term perspective changes after a study abroad course to Nicaragua in 2018?

### **Background and Setting**

In spring 2018, nine agriculture majors from Louisiana State University participated in a one-week study abroad course to Nicaragua. The participants had the unique opportunity to visit and experience various agricultural industry sites including a national coffee producer and Starbuck's Coffee exporter, cattle ranch, rice farm, and tobacco producer. Students also participated in many different recreational and cultural excursions during the course to develop a more holistic perspective of Nicaragua and its culture. Until civil unrest in 2018, Nicaragua had experienced rapid growth of its tourism sector, as alternative forms of tourism, like eco-tourism, emerged (Aldrich, 2016). Unfortunately, the country has still not completely recovered from these events (The Economic Times, 2018; Martin, 2018). As a result, all study abroad programming was stopped at Louisiana State University to Nicaragua.

It is also important to note that the culture and economy of Nicaragua relies heavily on the agricultural industry. For example, agriculture plays such a vital role in Nicaragua that 31% of the country's population is employed by the agricultural industry and up to 90% of the country's rural population relies on agriculture as its primary means of securing a livelihood (U.N. Development Programme, 2020; U.N. World Food Programme, 2020). Further, more than 70% of its population is actively engaged in subsistence agriculture, reflecting the importance of agricultural knowledge among even the most impoverished citizens. As a result, this context provided an optimal setting for university agriculture students to experience dissonance and ultimately, transformational learning (O'Malley et al., 2019). Therefore, the unique context and design of the study abroad experience greatly influenced the design of this investigation.

### Methodology

We grounded this study, methodologically, in Moustakas' (1994) phenomenological approach. Phenomenological research focuses on understanding the *lived experiences* of individuals and meaning regarding "...a phenomenon (or topic or concept) for several individuals" (Creswell & Poth, 2018, p. 314). Fundamental to phenomenological research is the distillation of the *essence*, or the central meaning of individuals' experience (Moustakas, 1994). As such, phenomenological research is fitting to explore "affective, emotional, and often intense human experiences" (Merriam, 2009, p. 26). To achieve this, Moustakas (1994) advocated for four distinct phases to facilitate phenomenological research: (a) epoché, (b) phenomenological reduction, (c) imaginative variation, and (d) a synthesis of composite textural and composite structural descriptions. Before offering our description of how we upheld each phase, it is critical to address the biases and experiences that influenced this investigation.

### Researcher Reflexivity

To accurately represent the study's findings, it is important to acknowledge how our previous experiences and worldviews may have influenced our interpretation of the data. First, we perceive it is important to disclose that each researcher in this study has advocated for study abroad courses as a valuable complement to students' higher educational experience. Each author has also previously conducted research on the impact of study abroad courses. Two of the researchers were also in attendance during the study abroad course to Nicaragua in 2018. Further, the first two authors are graduate students, and the other two researchers are faculty members at Louisiana State University. Therefore, some members of the research team have had relationships with the participants in this study for several years. We also perceive it is important to reveal that we approached this investigation using a constructionism epistemological lens and interpretivist theoretical perspective (Crotty, 1998). We believe that such factors may have influenced our interpretation of data. To reduce the influence of our preconceptions, we bracketed our experiences during analysis (Moustakas, 1994).

### Participant Selection

Polkinghorne (1989) argued phenomenological research should have a minimum of five participants. Therefore, we purposefully (Creswell & Poth, 2018) selected five ( $n = 5$ ) university agriculture students who participated in a study abroad course to Nicaragua in 2018. Previous data was collected and published from this cohort (see O'Malley et al., 2019). As such, the collection of additional data provided a more granular depiction of participants' outcomes. Of the five participants, four were female and one male. At the time of data collection, which was two years after the study abroad course, four of the participants were still enrolled at Louisiana State University and pursuing a bachelor's degree in agriculture, and the other participant had graduated. To maintain confidentiality, we assigned each participant a pseudonym.

### Data Collection

Because of the COVID-19 global pandemic, face-to-face interviews were not possible. Therefore, after IRB approval, we used an online video conferencing software, Zoom, to facilitate interviews. Two different researchers conducted interviews using the same semi-structured interview protocol. Example questions from the interview protocol included: *How has the experience in Nicaragua shaped your life since you have returned?* and *Because of your experience in Nicaragua, what have you told (or would you tell) others who are considering traveling to Nicaragua, Latin America, or another developing country?* During the collection of the data, we captured detailed fieldnotes regarding the setting, atmosphere, and overall emotions the participants expressed. These fieldnotes were mobilized as an additional source of data. We

also used data from the previous investigation that included student video reflections as well as observational analysis to triangulate findings (Creswell & Poth, 2018). All data sources were transcribed verbatim for analysis.

### **Data Analysis**

To analyze each source of data, we employed Moustakas' (1994) phenomenological approach. In the first phase, epoché, we employed bracketing to set aside any preconceived notions, assumptions, and experiences that may influence our interpretation (Moustakas, 1994). However, we recognize that to be bias-free was not possible. Next, we identified *significant statements* through the use of an open-coding approach (Moustakas, 1994). The identification of significant statements allowed us to create categories of the open codes, a concept known as horizontalization in phenomenological research (Moustakas, 1994). During this phase, the researchers met as a team to negotiate horizons and reduce the data through the phenomenological reduction phase (Moustakas, 1994). After data was reduced, we entered the imaginative variation phase by which we viewed the data from the different lenses, which helped emerge Mezirow's (1991, 2000) TLT as the most appropriate lens to ground our findings. As a result, we were able to explain *what* and *how* university agriculture students experienced regarding long-term changes to their perspective after a study abroad course to Nicaragua through a synthesis of *textural* and *structural* descriptions. The product of this process was described through three themes (Moustakas, 1994).

### **Qualitative Quality**

To uphold qualitative quality, we employed Tracy's (2010) criteria for excellent qualitative research. According to Tracy (2010), rigorous qualitative research should uphold eight criteria: (1) worthy topic, (2) rich rigor, (3) sincerity, (4) credibility, (5) resonance, (6) significant contribution, (7) ethics, and (8) meaningful coherence. For example, because of the large number of study abroad courses at institutions of higher education in the U.S., distilling the long-term outcomes of students could provide value to administrators, designers, and facilitators moving forward. Additionally, providing a deeper look into the long-term impacts of study abroad courses could allow researchers to better understand how to market such experiences to university agriculture students in the future. To uphold Tracy's (2010) standards, we chose a topic that was interesting, relevant, significant, sincere, and, timely. Then, to ensure a rigorous and credible investigation, we implemented procedures uniformly as we conceptualized, collected, and analyzed data. We also used multiple sources of data to establish Tracy's (2010) notion of "rich complexity of abundance" (p. 841). In particular, we upheld credibility by analyzing the phenomenon from diverse perspective and lenses using Moustakas' (1994) imaginative variation approach. Regarding resonance, Tracy described such as a "researchers' ability to meaningfully reverberate and affect an audience" (p. 844). To accomplish this, we provided a poignant interpretation of this phenomenon. We should also note that this investigation was conducted with an emphasis on procedural, situational, and relational ethical considerations for each participant. Case in point, all the data collected, including interview audio files, interview transcripts, and fieldnotes, were kept confidential from any individuals outside the research team. Finally, to ensure coherence, we meaningfully interconnected the literature with the findings of this investigation, which are presented next.

## **Results**

Through our synthesis of the study's textural-structural descriptions, three themes emerged: (1) dichotomous learning outcomes, (2) recognition of power and privilege, and (3)



advocacy for global experiences. When viewed through the lens of TLT, the themes highlight the long-term changes in perspective that university agriculture students at Louisiana State University experienced after a study abroad course to Nicaragua in Spring 2018 (Mezirow, 2000). Each theme forms the basis of the essence of the phenomenon, i.e., *although the students' experienced dichotomous learning outcomes, their recognition of power and privilege fomented a change in perspective by which they began to advocate for international experiences for others*. Descriptions of the three emergent themes, with supporting evidence, are provided in Table 1. Then, a narrative of each theme follows.

**Table 1**

*A Description of the Emerging Themes Identified in this Study*

Theme	Description	Example
Dichotomous Learning Outcomes	Participants' outcomes varied based on their level of academic maturity.	Self-examination resulted in "regret" or "disinterest" because of a lack of prior cultural exposure.
Recognition of Power and Privilege	Comparisons between power and privilege in U.S. & Nicaragua.	Participants felt both "guilty," "grateful," "frustrated," and "upset" when comparing experiences in Nicaragua to their own lives.
Advocacy for Global Experiences	Championing for global experiences and study abroad course to others.	Students felt "inspired," "invigorated," and significant "wanderlust" following the program, resulting in many opportunities for advocacy.

### **Theme 1: Dichotomous Learning Outcomes**

Through our analysis of data, it became apparent that participants' learning outcomes seemed to vary based on their level of academic maturity. For instance, students who were underclassmen during the study abroad course often recounted events with less emotional impact than upper-level students. Further, students that had less global experience and little prior exposure to international agriculture often maintained that although the course was worthwhile and helped them build relationships with peers and faculty, the experiences were either outside of their academic scope or did not support their career interests. To demonstrate, Anna offered insight into the dichotomous nature of the outcomes she experienced in Nicaragua. She explained: "I think being a freshman, it kind of negatively impacted me during the trip because I didn't know what I was even wanting to do at that point." She continued: "So, I went in very open-minded not knowing what to expect, but also with Nicaragua, being a freshman, the positive thing is that you can adjust more quickly." April echoed these sentiments when she revealed the course did "...not necessarily [make an impact]...as far as stuff that I want to do for a career." Similarly, after reflecting upon her time in Nicaragua, Taylor stated:

It was kind of hard [to process] because it was my first time ever being somewhere internationally and getting all these experiences, it was kind of overwhelming at some points, but you learn to kind of just go with it and not to stress yourself out about it. But I

think at night when I finally laid down for the day is when I fully kind of just like started to process things that I didn't know had as big an impact as they did have on me... I wish I could have built more relationships. I think it was such a new concept to me... it was my first trip ever as an 18-year-old.

On the other hand, upperclassmen and students who had more international experience had a different perspective on their outcomes from the study abroad course. Take the case of Beth, who when probed about the long-term outcomes she had experienced in Nicaragua, responded:

Yes, they did, in a very broad sense too because they connected to my undergrad, because of the science [focus] ... but then they also connected to the education part of [my current major] to because...I think it's good for everyone, especially educators, to be exposed to things that are different, to people that are different, and then just kind of forcing you to think outside of the box, if that makes sense. Even if it wasn't directly pertaining to what I was studying in the [United] States, I think all of it is very transferrable.

Morgan reinforced this idea, adding: "We learned stuff that was parallel to what I was learning, and even stuff that I'm still learning... it's like, 'Oh, I remember them talking about that there.' I feel like it really helped me become more well-rounded..." As a consequence, it appeared that university agriculture students' academic maturity level appeared to influence the intensity at which they experienced transformative long-term outcomes. Despite the dichotomous learning outcomes experienced by students, all participants recalled that recognizing power and privilege on their trip led to important changes in their perspectives.

## **Theme 2: Recognition of Power and Privilege**

When students arrived in Nicaragua, they were confronted with gender inequality, political corruption, and disparities regarding power and privilege. Comparisons between their lived experiences in Nicaragua and their existing assumptions of the U.S. appeared to elicit powerful shifts concerning how they viewed the world. In particular, participants reported their experiences prompted them to consider more deeply the implications of social inequity. For example, participants had vivid memories of the dissonance they experienced in this regard. Beth explained: "...I didn't realize before just how far back they are as far as women's rights and things. Sexism is rampant. I mean, I know that that stuff is everywhere, but I didn't realize how deeply ingrained it is." She then added, "It's not like it was outwardly aggressive, but you felt it." Meanwhile, Anna recalled how her experiences in Nicaragua opened her eyes to power imbalances, especially in regard to how power differentials were profoundly entrenched and upheld. She shared: "So I feel like to fight against those really traditional values is very difficult and very tough, especially when they don't... really have a government that does as much to try to listen to the people as we do." The lived experiences of participants also appeared to reorient aspects of their lives. For instance, after witnessing the poor living conditions in Nicaragua, Taylor recounted how the experience ignited a passion to advocate for others:

Getting to see it firsthand, it was hard because here, I mean, we see of course homeless people on the street, but we don't see families really living like that. And it's not just in one central area, it's everywhere. It really changed how I view different countries... So, we were all in tears, just really sitting back and realizing what we have...these people are living on dirt floors in tin houses. And I still, to this day, think about that moment over and over again. Getting to see the differences between how good we have it here in America and, like, how they're sometimes forced to live [in Nicaragua]. I have a higher

respect for those people than I did before. And so that comes with, I'm more likely to help a lot more now.

The impact of the study abroad course was also evident as participants articulated how their perspectives had transformed because of the time in Nicaragua. Morgan explained that his interactions with locals stirred a reexamination of his privilege. He reflected: "...I felt like a rich, white boy...that's what I meant by a perspective change. I really have looked at life so differently after that trip. Just to be grateful for everything...there's so much that we take for granted..." Such realizations appeared to serve as a basis for important changes in perspectives for participants in this investigation. Or, as Morgan explained: "Really afterwards, I just took a major step back and start[ed] to look at my life a little bit differently... [I] realized how privileged we really are and just to not take what we have for granted. That was a really huge [aha] moment for me."

### **Theme 3: Advocacy for Global Experiences**

After having their eyes opened to the realities of power and privilege in Nicaragua, participants reported they began to advocate for global experiences among their peers, international students, family, and friends after returning to the U.S. This commitment to advocacy appeared to take on an array of forms. For example, some participants became heavily involved with campus organizations that formally advocated for study abroad courses and welcoming foreign exchange students. On this point, Morgan shared: "I actually worked with the Global [Agriculture] Ambassadors at Louisiana State University. [We] help a bunch of visiting scholars... and bring them to Walmart and helped them move in their apartment." Similarly, Taylor reiterated this sentiment: "When we have visiting scholars on campus, I give up my time and go help them to make sure they feel welcomed... I want to make sure they have a good experience, just like I did."

Meanwhile, other participants enrolled in additional study abroad courses after they returned from Nicaragua. Taylor explained: "So when I got back, I immediately realized I wanted to do a trip like that again. And so, my sophomore year I went to Cuba..." April also participated in additional international experiences, she recalled: "Since coming back from Nicaragua, I've gone on another study abroad to Mexico this past January, and I was supposed to be going to Africa this summer, but it's obviously not happening [because of the COVID-19 global pandemic]." When asked if they had participated in other study abroad opportunities, Beth responded: "Yes. The year after I went to Nicaragua... I went [to] Costa Rica... I have a lot of wanderlust right now. But I also reflect on a lot of the emotional things that I [experienced] whenever I was there." All participants in this investigation also reported they advocated for study abroad courses to promote enhanced global thinking and understanding among their family and friends. For example, when discussing if she promoted study abroad courses to others, April affirmed: "So, definitely, anybody who has the chance to go on a study abroad, I say 100% do it." "Yes, absolutely," agreed Beth. Morgan also added: "They need to go. Really... I think that the younger, the better. The sooner that you get your eyes opened to something like this, the better. It's life changing. It really is." As a result of the participants' lived experiences in Nicaragua, they began to advocate for global experiences in diverse and meaningful ways.

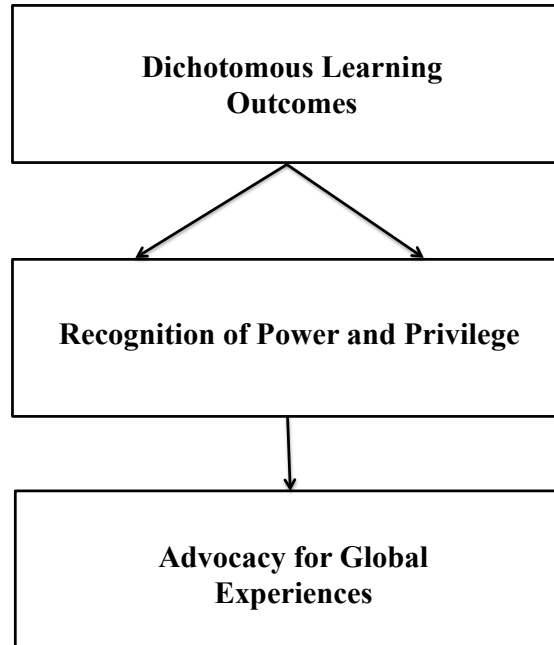
### **Conclusions**

This study explored how university agriculture students' shared experiences during a study abroad course to Nicaragua influenced their long-term changes in perspective. As a result

of our phenomenological analysis, three themes emerged. We conclude that each theme helped describe the complexity of the phenomenon's essence, which was that *although the students experienced dichotomous learning outcomes, their recognition of power and privilege fomented a change in perspective that encouraged them to advocate for global experiences* (see Figure 1).

**Figure 1**

*The Essence of the Phenomenon*



Although the participants described experiences as positive overall, in the first theme, we demonstrated that long-term outcomes achieved as a result of the study abroad course appeared to vary based on students' level of academic maturity. For example, students who were underclassmen reported their outcomes with less emotional impact than upper-level students – a finding supported by Wielkiewicz and Turkoski (2010). We also concluded that students who were underclassmen during the course maintained their experience in Nicaragua did not necessarily align with their career aspirations or support their learning in regard to their academic major. However, upperclassmen and students with more global exposure indicated the study abroad course helped them prepare for advanced studies and their future careers. Harder et al. (2015) reported that study abroad course could help increase the employability of students from a job recruiters' perspectives; however, our finding adds new dimensions to the knowledge base by demonstrating that students' academic maturity may influence the intensity of outcomes they achieve concerning intellectual growth and career preparation.

Despite the dichotomous nature of students' learning outcomes, all participants noted that when they reflected on issues of power and privilege in Nicaragua, a powerful shift in perspective occurred. We conclude that students' lived experiences during the study abroad trip exposed them to forms of high-intensity dissonance that made them more deeply ponder the implications of social inequities in the world. Although previous literature (O'Malley et al., 2019, Pigg et al. 2020) has reported that university agriculture students experienced some short-term shifts in perspective in this regard, scant evidence exists in the literature on agriculture

concerning the long-term transformations that students endure after returning to their daily lives in the U.S. The final theme, advocacy for global experiences, addressed how participants began to incorporate new beliefs and worldviews in their daily lives because of their changes in perspective. In particular, students joined globally focused student organizations, engaged in additional study abroad courses, and encouraged family, friends, and peers to open their eyes to the realities of the lived experiences of individuals that live in different cultures. Such a notion does not appear to have been explicitly explored in the literature on agriculture.

### **Discussion, Implications, and Recommendations**

Study abroad courses involve complex partnerships among faculty, students, and the host country. These educational experiences are often more complex, demanding, and time-consuming than other pedagogical approaches (Reilly & Senders, 2009; Schlarb, 2019; Taylor & Rivera, 2011). Nevertheless, mounting evidence has demonstrated the transformative potential of short-term study abroad courses for university agriculture students (Dobbins et al., 2019, 2020; O'Malley et al., 2019; Roberts & Edwards, 2016; Roberts et al., 2020a). The current investigation added to the knowledge base by examining the long-term outcomes that students experienced after returning to the U.S. As a result, this study held critical implications for research, theory, and practice.

First, because students in this investigation experienced dichotomous learning outcomes, future research should focus on how students' academic maturity may influence their long-term impacts. We also recommend that faculty and other practitioners of study abroad address such differences prior to departure and plan how to navigate these complexities during the course. For the study abroad course under investigation, students were required to participate in pre-departure seminars by which they learned about programming details, cultural differences, and other relevant information. Moving forward, we recommend that greater effort should be made for students to consider individual academic and career connections before departure (O'Malley et al., 2019). We also recommend that faculty develop assignments that require students to purposefully create connections between their academic major and their experiences abroad. In this investigation, the recognition of power and privilege played a critical role in fostering transformative learning for university agriculture students. We recommend that faculty make existing cultural systems, ideologies, and structures of power visible for students during study abroad courses. Such phenomena appeared to help students make sense of the differences between Nicaragua and Louisiana in the current study (O'Malley et al., 2019; Pigg et al., 2020). Perhaps to make these power dynamics more accessible for students, faculty could embed approaches that seek to illuminate norms and traditions that are often less tangible and difficult for students to grasp (Hartman & Kiely, 2014). As such, we recommend that visual methodologies be incorporated into study abroad courses so that students can capture issues and problems they may struggle to assign meaning to during the experience (Dobbins et al., 2019, 2020; Roberts et al., 2020b). Then, through individual and social reflection of powerful images, the students can more deeply ponder the lived experiences of individuals who lack power in different social systems and begin to gain a greater sense of empathy (O'Malley et al., 2019). Through this shared vision and reflection, students could also serve as a conduit into marginalized spaces by uplifting the voices of the oppressed and advocating for transformative experiences for others (Kiely, 2004, 2005; Roberts & Edwards, 2015).

On this point, the current investigation reported that students' changes in perspective led them to advocate for global experiences for others. Going forward, more research is needed to

examine whether these behaviors are upheld as the participants move in different life phases, such as when they begin a career and family. We also recommend that administrators, faculty, and other decision-makers consider how to support and leverage students' shifts toward a greater orientation to advocate for the acquisition of global knowledge after returning to the U.S. (Roberts & Edwards, 2016). For example, perhaps panel discussions could be facilitated for students who participated in study abroad courses to provide discussion and ideas about ways they can continue to engage globally. Finally, to better capitalize on the transformative potential of study abroad courses, we recommend that faculty assess students' cultural and educational biases before, during, and after students' experience. If a greater understanding of these factors is achieved, perhaps faculty could address misconceptions and better support students' transformative learning as they integrate such into their daily lives (Tarrant & Lyons, 2012).

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