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EFFECTS OF SHORT-TERM STUDY ABROAD ON MINDSET

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An Independent Study Submitted in Partial Fulfillment of the Requirements for the Degree of MASTER OF SCIENCE

Department of Communication Sciences & Disorders ILLINOIS STATE UNIVERSITY FALL 2019

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An individual's mindset can play a large role in many aspects of their life. Dweck (2016) defines mindset as the way that people perceive themselves. Mindset is something that can be viewed on a continuum, moving fluidly between a fixed mindset and a growth mindset. Dweck defines a fixed mindset as the belief that basic qualities, such as intelligence or talent, are simply fixed traits that cannot be changed. Alternatively, she defines growth mindset as the belief that intelligence and talent can be changed through determination and hard work. According to Dweck (2016), mindset is developed at a young age. In her book, *Mindset: The New Psychology of Success*, she describes "The Power of Yet." This concept explores how we communicate with children during critical points in their development. Dweck explains that using the words "yet" or "not yet" when talking with children encourage their confidence. Additionally, she suggests praising work ethic rather than intelligence or talent in order to encourage the development of a growth mindset from a young age.

The adoption of a growth mindset is being encouraged in learning environments, as it allows individuals to grow through their experiences and continue to develop skills through hard work and dedication (Dweck, 2016). Experiences, such as a study abroad experience, may cause one's mindset to shift toward a growth mindset. According to the 2018-2023 strategic plan created by Illinois State University (ISU), the university seeks to implement a greater amount of experiences to foster diversity and inclusion within the ISU community. In order to achieve this, the strategic plan referenced a goal focused on increasing the amount of study abroad experiences for students to participate (Illinois State University, 2018). The ISU Department of Communication Sciences and Disorders (CSD) took this goal and created a study abroad program specifically geared towards CSD students (Illinois State University, 2019). CSD study abroad programs were created in order to accommodate the rigorous coursework that CSD

undergraduate and graduate students have been tasked with (Illinois State University, 2019). The challenging academic sequence in addition to required practicum can make it difficult for CSD students to find the time to add additional extracurricular activities to their college experience. In addition, CSD students tend to thrive on structure and routine, both of which can be difficult to find in a study abroad experience (Baggs, 2009). The goal of the CSD study abroad program is to provide CSD students with an opportunity for self-discovery, as well as a chance to learn about other cultures and clinical practices all within a different cultural setting (Illinois State University, 2019).

According to Purdue University, study abroad consists of any number of programs that take place outside of the United States that allow students to earn course credit towards the completion of their degree (Brzezinski, 2010). Study abroad programs can have many different forms including field study, classroom study, internships, service learning, and a number of other programs. Additionally, study abroad programs can take place in a number of different term lengths. Long-term study abroad programs are among the most commonly known and typically range from one semester (16 weeks) to a full year (Athena Study Abroad, 2017). Short-term study abroad programs, which range anywhere from one week to ten weeks, are quickly becoming more popular among college students (Athena Study Abroad, 2017). Short-term study abroad programs provide many of the same experiences of long-term study abroad programs, but at an accelerated rate, allowing for a more cost-friendly experience and an increased level of structure while abroad (Spencer & Tuma, 2002).

The following review of the literature will address the effects of mindset, the effects of studying abroad, and the relationship between the two. Three research studies will be reviewed that explore outside factors and their effect on mindset, as well as how mindset impacts academic

achievement. Seven additional research studies will examine the different types of study abroad experiences and their impact on student learning. A comparison between the effects of short-term and long-term study abroad will also be explored.

Literature Review

Effects of Mindset

For many students, mindset can play a pivotal role in academic achievement. Researchers Claro, Paunesku, and Dweck (2016) sought to discover whether there was a relationship between growth mindset and academic achievement across a wide array of socioeconomic (SES) statuses. Researchers also wanted to determine if students who came from low SES homes were more likely to have a fixed mindset than students from high SES homes. Additionally, researchers wanted to find out whether a growth mindset among low SES students yielded similar test results to students with a fixed mindset from high SES homes. Claro et al. utilized a nationwide sample of 10th grade students enrolled in the public-school system from Chile to conduct their research. Every other year, the Chilean government conducts standardized testing for all 10th grade students and their families. This standardized testing is utilized to measure mathematics and language skills. According to Claro et al., the same 2012 standardized test also measured the flexibility of intelligence along the mindset continuum for the first time. On this portion of the survey, students answered a variety of questions using a Likert-scale rating system. Students who answered "agree" or "strongly agree" to statements signifying that intelligence cannot be changed were placed in the fixed mindset category whereas students who answered "disagree" or "strongly disagree" to the same statements were placed in the growth mindset category. A third category was also created to place students who were uncertain. Researchers then calculated the

correlation between mindset scores and achievement of each student based on their standardized testing scores. Additionally, researchers also calculated the correlation between academic achievement and mindset in relation to each students' specific background. This was completed by examining a number of variables such as monthly income and parent education that were measured through the parent questionnaire associated with the standardized testing.

Results from the study showed that the students who adopted a growth mindset outperformed their peers on the math and language portions of their standardized testing across all socioeconomic levels. Additionally, researchers found that the students from low SES homes were twice as likely to adopt a fixed mindset than their peers from high SES homes. Results also indicated students from low SES homes who adopted a growth mindset showed similar test results to their high SES peers who had a fixed mindset. While mindset can play a large role in academic achievement in students across all socioeconomic strata, there are many other contributing factors that can affect academic outcomes.

Some additional factors that can largely affect mindset are grit and commitment.

Researchers Tang, Wang, Guo, and Salmela-Aro (2019) sought to discover whether there was a relationship between growth mindset, commitment to a goal, and the level of grit a student demonstrated. Grit can be described as the ability to persevere and overcome adversity in a variety of situations (Duckworth, as cited in Tang et al., 2019). The participants in the study consisted of 747 sixth through ninth grade students enrolled in secondary school in Finland.

These participants took part in a longitudinal study called "Mind-the-Gap" which required students to complete a questionnaire each year between sixth and ninth grade. Grit was measured using a short-version grit scale, which aimed to measure each student's consistency of interests.

Consistency of interests was measured by asking students to answer specific questions (e.g., "I

am diligent") using a Likert-scale measuring system. Growth mindset was measured using the *Growth Mindset Measure*, which asked questions such as "A person can achieve almost anything if they really want to and are willing to work for it." Similar to the grit scale, participants were asked to rate their responses to a series of questions using a Likert-scale rating system. These questionnaires were administered yearly over the course of 4 years. Results were drawn after all students had completed "Mind-the-Gap" after their ninth-grade school year.

Results from the study showed that there was a positive correlation between growth mindset and level of grit; however, there was a stronger correlation between commitment to a goal and grit. These positive correlations indicated that growth mindset and setting goals can have a positive effect on grit, which can be translated into the classroom and have an impact on academic achievement. This can be an important skill for students to learn in order to understand that academic achievement is something that they have control over.

In order to further explore how mindset affects students' academic achievement, Sriram (2014) conducted a study to determine whether first-year college students who were considered "high-risk" were able to assume a growth mindset following remedial intervention. Participants for the study consisted of 105 first-year college students in the south-western United States.

Students who were labeled as "high-risk" had SAT scores that fell at least 200 points below the average of 1150 and 1200. Participants were then divided into a treatment group and a control group. The control group consisted of 45 participants and the treatment group consisted of 60 participants. Prior to treatment, all students completed a pretest in the form of the *Implicit Theory of Intelligence Scale*, which measured academic discipline, academic self-confidence, commitment to college, general determination, goal striving, and study skills. Following the pretest, assignments were given to both the treatment and control groups. These assignments

required students to visit a website one time a week for 4 weeks. The treatment group visited a website that taught them that intelligence is malleable, while the control group visited a website that taught them how to improve study skills. Posttests utilizing the same measures as the pretest were administered to all participants following the remediation to determine whether mindset changed.

Results from the study showed that the control group's mindset did not change between pretest and posttest; however, the treatment group's mindset changed significantly. Conclusions from the study indicated that, in order for mindset to change during the college years, intervention is needed so that students understand that intelligence is malleable. While intervention can cause a change in mindset, there are several other factors that can contribute to how mindset changes. Personal experiences, such as studying abroad, can play a primary role in how mindset shifts along the continuum.

Effects of Studying Abroad

There is substantial evidence that states that the duration of the study abroad trip can play a large role in the level of impact. Dwyer (2004) conducted a research study that examined the relationship between specific study abroad program features (i.e., duration of study, enrollment in foreign university classes, etc.) and student outcomes. Participants included 3,723 individuals who studied abroad between the years of 1950 to 2000. Of the 3,723 participants, 25 programs were covered across 14 countries representing more than 500 U.S. colleges and universities were represented. Approximately 32% of participants (1191 students) studied abroad for an entire year, 62% (2308 students) for a semester, and 6% (224 students) for a summer term. Each participant was sent a survey via mail consisting of 28 questions. Questions were divided into

three different subtypes: basic demographics, impact of key study abroad elements, and impact of study abroad on select behaviors, attitudes, and specific achievements.

Results from the study were divided into five different categories, including general findings, academic attainment, intercultural development, career impact, and personal growth. Results from the study indicated students who studied abroad for an entire year were more likely to study abroad again following their first experience, were more likely to attain a higher level education (i.e., Master's and/or Ph.D.), were more likely to learn about other cultures, were more likely to speak a foreign language within their workplace, and were more likely to have increased self-confidence following their study abroad experience.

Additionally, Degraaf, Slagter, Larsen, and Ditta (2013) sought to discover the personal and professional long-term impacts of a semester abroad. For this study, there were 193 participants. Approximately half of the participants had studied abroad within 10 years of the study being conducted, and half had not. Data for the study were collected through the use of an online survey. Participants were also asked to answer open-ended questions related to the personal impacts of their time spent abroad. Personal impact questions were related to changes in mindset, personal skills, and self-confidence. Participants were also asked to engage in a personal interview with the researchers. Of the 193 participants, 26 of them agreed to be interviewed by researchers.

Qualitative data from both the interviews and the questionnaire showed that individuals who studied abroad created deeper relationships with their peers, increased their social skills, and increased their intercultural curiosity. Additionally, qualitative data showed that many of the participants viewed their study abroad experience as "life-changing." Results from the study showed that the time spent abroad had several positive impacts in a short amount of time.

Additional research conducted by Gullekson and Tucker (2013) examined the changes that take place in intercultural communication apprehension as a result of emotional intelligence following a short-term study abroad experience. The researchers predicted that emotional intelligence, (i.e., the ability to be aware of one's own emotions as well as others, and use that awareness to guide one's thinking and actions) would positively impact intercultural communication apprehension. The study consisted of 93 undergraduate participants enrolled in the Global Consulting Program (GCP) at a midwestern university. In order to measure emotional intelligence, researchers utilized the Global Trait Emotional Intelligence Measure. This instrument was used to measure self-perceptions of general emotional functioning. The test consisted of 15 questions such as: "Generally, I am able to adapt to new environments." Participants were asked to answer each of the questions using a 7-point Likert-scale rating system ranging from (1) strongly disagree to (7) strongly agree. The pretest was completed prior to departure for their study abroad trip. The same measure was used to collect posttest data following the study abroad trip. An additional measure called the *Intercultural Communication* Apprehension Scale was used to measure intercultural communication apprehension. This 14item assessment was also included in the pretest and posttest and consisted of questions such as: "Communicating with people from different cultures makes me feel uncomfortable." Responses were collected using a 5-point Likert-scale rating system ranging from 1 (strongly disagree) to 5 (strongly agree).

Results from the study showed that higher emotional intelligence scores played a large role in predicting intercultural communication apprehension. Researchers found that participants who displayed a greater level of emotional intelligence prior to their study abroad experience demonstrated a greater reduction in intercultural communication apprehension following their

study abroad experience. These results showed that time spent in a short-term study abroad program was sufficient to impact students in a positive way.

A research study conducted by DuVivier and Patitu (2017) examined self-perceptions related to global confidence before and after a 3-week short-term study abroad program. The study consisted of 14 participants, all enrolled in the student affairs graduate degree program at Wright State University. In order to measure self-perception, all participants were asked to complete an online survey during the semester prior to their study abroad experience. The survey consisted of open- and close-ended questions, as well as multiple choice and short answer. Post-survey responses were collected within 3 weeks of concluding their study abroad experience using the same on-line survey.

The results of the study showed that 12 of the 14 participants showed improvement in their personal growth following their study abroad experience. Additionally, 12 students reported improvement in their self-perceptions as well as a "thirst for more international experiences."

Further research conducted by Wang, Peyvandi, and Moghaddam (2008) sought to determine the effects of a 2-week study abroad program on diversity attitudes in college students. According to researchers, diversity attitude is described as the diverse viewpoints that prepare college graduates for careers within a global context. This study used 35 graduate and undergraduate students enrolled in the Craig School of Business at California State University, Fresno. All students who were planning on studying abroad had no previous experiences traveling to other countries prior to their study abroad trip. In order to measure how diversity attitudes changed as a result of studying abroad, researchers created a web-based survey that was administered prior to the study abroad experience and after the study abroad experience. The

survey consisted of eight items and utilized a Likert-scale rating system ranging from 1 (strongly disagree) to 7 (strongly agree).

As the researchers expected, the results indicated that students experienced a positive change in their diversity attitudes following their study abroad experience. Survey results showed that time spent abroad increased participants openness to diversity. Additionally, survey results revealed that time spent abroad created intellectually stimulating experiences that challenged participants' beliefs and perspectives regarding other cultures. Like previous studies, these results support the findings that short-term study abroad experiences can have a major impact on intercultural sensitivity. Additional research explored how exposure to a different country or culture can change the perceptions that a student may have about a certain environment.

In order to measure how exposure to different cultures can impact students, Carley and Tudor (2006) conducted a research study to determine how perceptions of a host country (Mexico) changed before and after a short-term study abroad experience. Participants for the study were 120 undergraduate students who were studying marketing or another business-related field. In order to measure how perceptions changed, participants were divided into two groups. The experimental group consisted of 41 students, and the control group consisted of 79 students. Participants in the experimental group completed a pre-survey prior to the study abroad experience in the spring of 2006. Post-survey responses from participants in the experimental group were collected shortly after their study abroad experience in the summer of 2006. Participants in the control group completed the same survey only once during a regularly scheduled class meeting during the summer 2006 semester. Survey questions sought to measure preconceived ideas about Mexico. Survey questions were made up of bipolar adjectives such as

"rich/poor, powerful/powerless." Students were asked to rate how they viewed Mexico using these adjectives through the use of a 7-point Likert-scale rating system ranging from (1) which represented the first adjective, and (7) which represented the second adjective. Participants were also asked to answer an open-ended question by describing what came to mind when they thought of Mexicans and Mexico.

Results from the study showed similar perceptions between the control group and the pretrip experimental group; however, there was a significant difference in perception between the control group and the post-trip response. Additionally, results from the qualitative portion of the survey showed that participants who had spent time abroad had a fuller and more complex view of Mexico. Though this experience was only 2 weeks long, results indicated that participants in the experimental group underwent substantial change in their mindset following their study abroad experience.

Additionally, Geyer, Puts, and Misra (2016) conducted a study to investigate how leadership skills and career aspirations were impacted by participation in short-term and long-term study abroad programs. The study had a total of 970 participants, recruited from higher education study abroad offices across the U.S. Data were collected through the use of a 41-question survey that was administered using SurveyMonkey. The questions were divided into five sections: background information, study abroad experience/no study abroad experience, leadership qualities, professional skills, and international exposure and diversity.

Findings from the study showed that participants who engaged in either a long-term or a short-term study abroad program were more likely to feel positive about their international exposure and diversity than students who had not participated in a study abroad program of any

kind. Additional survey results showed that participants who engaged in a short- or long-term study abroad program held more leadership positions than those who had not studied abroad.

Overall, research has confirmed that mindset is flexible and falls along a continuum, meaning that it can change based on a number of different experiences. The research showed that factors such as specific intervention, SES, and general life experiences can all impact where a person's mindset falls along the continuum. It has also been confirmed through the examination of previous research that students who have spent time studying abroad have gained invaluable life experience compared to those students who have not. Researchers established evidence that study abroad of any duration increased participants' diversity attitudes, intercultural communication skills, and perceptions of other countries and cultures. However, what is unclear is how short-term study abroad impacts mindset. The present study seeks to measure how mindset changes along the continuum after participating in a short-term study abroad experience.

Method

This study was conducted to measure whether mindset changes after participating in a short-term study abroad experience. The data collected from this study were drawn from pre- and post-surveys that were required coursework for all students to complete as part of their independent study.

Participants

The potential participants were 18 undergraduate and two graduate students at Illinois

State University enrolled in the Illinois State University Communication Sciences and Disorders

(CSD) British Isles short-term study abroad program, which took place during spring break

2019. All were enrolled in an independent study that met monthly beginning in December to

complete activities prior to the trip. Completion of the mindset survey used for this study was one such activity.

Instrument

To answer the research questions, a survey consisting of seven questions was created for this study. The questions were phrased to balance both fixed and growth mindset so that participants were not automatic in their responses. Of the seven questions, four were phrased through fixed mindset perspective, whereas three were phrased through growth mindset perspective. Participants were asked to use a 5-point Likert scale ranging from "Not at all likely" to "Extremely likely" to answer each question. The mindset survey completed before the study abroad experience used the following prompt: "How likely are you to…" This prompt was changed to: "After studying abroad, how likely are you to…" in order to survey respondents upon their return. A copy of the pre- and post-survey can be found in Appendix A.

Procedure

All students answered the same seven questions in addition to other coursework two weeks prior to their departure. One week after all students returned home from their study abroad experience, they answered the same seven questions (post-survey) during a class meeting as part of a final assignment for their independent study.

After the students returned home from their study abroad experience, recruitment was conducted by the co-PI during the final independent study meeting. Potential participants were informed that the co-PI was interested in using the answers from the mindset surveys to examine how mindset may change after participating in a short-term study abroad experience. A copy of the recruitment letter can be found in Appendix B. In order to protect the participants' identity, each participant created a personal identifier to be used in place of their name in order to connect

the responses of the two surveys. Personal identifiers consisted of a four-digit code, the first two being the participant's month of birth, and the last two digits being the participant's last two digits of their home address. Of the 20 students that participated in the independent study, eight granted consent to use their mindset survey, yielding a 40% participation rate. A copy of the consent letter can be found in Appendix C.

Data Analysis

All data were inputted using Microsoft Excel. Responses to pre- and post-surveys were compared and trends were compiled based on the change in responses on the pre- to post-surveys. Individual, as well as group changes were analyzed for each question.

Results

The purpose of this study was to investigate whether mindset changes as a result of a short-term study abroad experience. In order to obtain this information, a survey was created and distributed to undergraduate and graduate students at Illinois State University enrolled in the CSD British Isles short-term study abroad program, which took place during spring break 2019. The survey contained seven questions to examine where students fell along the mindset continuum. The questions were phrased to balance both fixed and growth mindset so that students were not automatic in their responses. Eight of the 21 undergraduate and graduate students enrolled in the short-term study abroad program granted consent to use their data in the study.

The results of the survey are presented in three sections: group responses for growth mindset questions, group responses for fixed mindset questions, and individual trends.

Group Responses for Growth Mindset Questions

Three questions on the survey took a growth mindset perspective. The first asked participants how likely they would be to do something without previous experience. The second asked participants how likely they were to research other cultures when it was not required of them. The third asked students how likely they were to focus on a goal until it had been accomplished.

The group means for growth mindset responses are displayed in Table 1. Responses from the first question showed a positive change from 2.5 (not very likely/it depends) to 3.5 (it depends/somewhat likely). This positive change indicates that, depending on the situation, respondents were not very likely to do something they had no experience in doing prior to their study abroad experience. However, after their study abroad experience, they would be somewhat likely to do something with no prior experience, depending on the situation. Group responses from the second question increased from 4 (somewhat likely) to 4.5 (somewhat/extremely likely). This shows that the respondents were more likely to research other cultures following their study abroad experience. Mean ratings from responses to the third question also increased from 4.5 (somewhat/extremely likely) to 5 (extremely likely), showing that following their study abroad experience, students would be more likely to focus on a goal until it had been accomplished. All respondents responded with a 5 (extremely likely) to this question upon returning home.

Responses from all three questions showed a positive change as a result of participating in a short-term study abroad experience. As a group, respondents were more likely to do something they had no experience in doing. The average change in response was +1. Although still positive, less change in response (+.5) was noted for the second two questions; however,

both of these questions were in the 4 or 4.5 range for pre, leaving less room for an increase in ratings.

Group Responses for Fixed Mindset Questions

The remaining four survey questions took a fixed mindset perspective. The first question asked participants how likely they were to only do something they had previous success in doing. The second asked participants whether they viewed failure as a negative thing/mistake. The third asked how likely students were to do something only if there were others to do it with them. The final question asked how likely students were to make a plan and follow through with it.

The pre- and post- group means for fixed mindset responses are given in Table 2. Responses from the first question demonstrated a negative change from 3.5 (it depends/somewhat likely) to 3 (it depends). This negative change indicates that following their study abroad experience, depending on the situation, respondents were more likely to try something in which they had no previous success. Group responses for the second question remained consistent. Respondents reported a 3.5 rating (it depends/somewhat likely) on both the pre- and post-survey. This indicates that, depending on the situation, respondents would be just as likely to do something when there were others to do it with them as before. Responses from the third question displayed a negative change from 3 (it depends) to 2.5 (not very likely/it depends). This negative change in ratings suggested that following their study abroad experience, respondents would be less likely to view failure as a negative. Group responses to the final question also remained consistent. Respondents indicated that they were extremely likely (5) to make a plan and follow through with it both before and after their study abroad experience.

Mean responses for two of the four fixed mindset questions exhibited a slight negative change in response. This negative change demonstrates that respondents would be less likely to

view failure as a mistake and less likely to only do things they had previous experience in doing as a result of participating in a short-term study abroad experience. The average change in response was (-0.5). No change in response was recorded for the other two questions. Figure 1 depicts these changes.

Individual Trends

On the pre-survey, Student 1 demonstrated high scores of 4 (somewhat likely) and 5 (extremely likely) on two out of three growth mindset questions. Following the study abroad experience, these ratings were maintained. Prior to the study abroad experience, Student 1 demonstrated lower scores of 2 and 3 on three out of four fixed mindset questions, indicating that she was not very likely to take a fixed mindset perspective. After the study abroad experience, Student 1 maintained all but one rating. These ratings showed that prior to the study abroad experience, Student 1 was already likely to take a growth mindset perspective. Student 1's response to one item indicated that following the study abroad experience, she was less likely to view failure as a negative thing. Overall, her rating changed from 3 (dependent on the situation) to 2 (not very likely) on this fixed mindset item. Survey data for Student 1 can be found in Table 3.

Pre-survey responses for two of the three growth mindset questions of Student 2 conveyed a score of 2, which indicated that she was not very likely to take a growth mindset perspective prior to studying abroad. Following her study abroad experience, Student 2's response ratings increased by 1 for all three growth mindset questions. For three out of the four fixed mindset questions, Student 2 reported high ratings of 4 and 5, indicating that she was somewhat to extremely likely to take a fixed mindset perspective prior to her study abroad experience. After studying abroad, Student 2's response showed a negative change for two of the

fixed mindset questions, indicating that following her study abroad experience, she was less likely to engage in fixed mindset behaviors. This negative change in ratings indicated that following her study abroad experience, Student 2 was less likely to view failure as a negative thing and less likely to only do something she had previous success in doing. The largest rating change (+2) concerned the question pertaining to making a plan and following through. This large change in rating indicated that following her study abroad experience, Student 2 was more likely to make a plan and follow through. Survey data for Student 2 can be found in Table 4.

Student 3 demonstrated a wide range (2-5) of ratings for the pre-survey growth mindset questions. A rating of 2 indicated that she was not very likely to research other cultures when it was not a requirement. A rating of 3 indicated that her willingness to do something she had no experience in doing was dependent on the situation, and a rating of 5 indicated that she was extremely likely focus on a goal until it was accomplished. Following her study abroad experience, Student 3 reported higher ratings (i.e., 4) for all growth mindset questions that were rated a 2 or 3 earlier, indicating that following the study abroad experience, Student 3 was more likely to take a growth mindset perspective. The largest increase (+2) implied that as a result of studying abroad, Student 3 was more likely to research other cultures when it was not a requirement. Pre-survey responses for all four of the fixed mindset questions were 4 (somewhat likely) or 5 (extremely likely), indicating that Student 3 was more likely to engage in fixed mindset behaviors prior to her study abroad experience. Following the study abroad, Student 3's response ratings remained high (3 and 5); however, a negative change (-1) was noted in two of the fixed mindset questions. This negative change confirmed that following the study abroad experience, Student 3 would be less likely to only do something she had previous experience in doing, and less likely to view failure as a negative thing. Response ratings were maintained and

remained high for the other two fixed mindset questions. This suggests that Student 3 was just as likely to only do things when there were others to do it with her and make a plan and follow through with it before and after her study abroad experience. Pre- and post-survey data for Student 3 can be found in Table 5.

Prior to the study abroad experience, Student 4 demonstrated ratings between 2 and 4 on the pre-survey growth mindset questions. A rating of 2 indicated that prior to the study abroad experience. Student 4 was not very likely to research other cultures when it was not a requirement. A rating of 3 indicated that her willingness to do something she had no experience in doing was dependent on the situation, and a rating of 4 indicated that she was somewhat likely to focus on a goal until it was accomplished. Following the study abroad experience, Student 4 reported higher ratings (4 and 5) on these questions, demonstrating that she would be somewhat more to extremely likely to take a growth mindset perspective. Comparison of ratings for all growth mindset questions showed a positive change of at least +1. As a result of the study abroad experience, the largest change in response (+2) concerned Student 4's likelihood that she would research other cultures when it was not a requirement. For this student, all four fixed mindset questions received a rating of 4 (somewhat likely) prior to studying abroad. Following her study abroad experience, all ratings changed. Student 4 demonstrated a negative change in three out of four of the fixed mindset questions, indicating that following her study abroad experience, she was less likely to only do something she had previous success in doing, less likely to only do something if there were others to do it with her, and less likely to view failure as a negative thing. The largest change in response (-2) indicated that following the study abroad experience, Student 4 was less likely to view failure as a negative thing. Survey response data for Student 4 can be found in Table 6.

Student 5 demonstrated high scores (3-5) on the pre-survey growth mindset questions. A rating of 3 indicated that her willingness to do something she had no experience in doing was dependent on the situation. A rating of 4 indicated that she was somewhat likely to research other cultures when it was not a requirement, and a rating of 5 indicated that she was extremely likely to focus on a goal until it was accomplished. Post-survey ratings for these questions remained high (4-5). The growth mindset question that increased in rating (+1) following her study abroad experience was the one that received the lowest rating (3) prior to the study abroad experience. Post-experience, her response indicated that she was more likely to engage in an activity she had no previous experience in doing. Prior to the study abroad experience, Student 5 demonstrated a range of scores (2-5) on the fixed mindset questions. Following the study abroad experience, all but one of these ratings were maintained. A rating of 2 indicated that she was not very likely to view failure as a negative thing. A rating of 3 indicated that her willingness to do something only when there were others to do it with her was dependent on the situation, and a rating of 5 indicated that she was extremely likely to make a plan and follow through with it before and after her study abroad experience. The only rating that increased in score was the question pertaining to only doing something she had previous success in doing in which she indicated that following the study abroad experience, she would be extremely likely to only do something she had previous success in doing. This suggests that the study abroad experience did not impact the fixed mindset behaviors measured in the survey. Pre- and post-survey data for Student 5 can be found in Table 7.

Student 6 exhibited a wide range of scores (1-4) on the pre-survey growth mindset questions. A rating of 1 indicated that Student 6 was not at all likely to research other cultures prior to studying abroad. A rating of 2 indicated that Student 2 was not very likely to do

something she had no previous experience in doing, and a rating of 4 indicated that that she was somewhat likely to focus on a goal until it was accomplished prior to her study abroad experience. Following the study abroad experience, student 6 reported higher scores (4-5) for all of the growth mindset questions. The large increases (+2 or +3) pertained to the questions in which Student 6 reported that she would be more likely to do something she had no previous experience in doing and research other cultures when it was not a requirement. Student 6 also reported an increase of (+1) on the question pertaining to focusing on a goal until it is accomplished following her study abroad experience. Student 6 rated all fixed mindset questions on the pre-survey with a 4. A rating of 4 implies that prior to her study abroad experience, she was somewhat likely to take a fixed mindset perspective. Following her study abroad experience, Student 6 reported a much wider range of responses (2-5). All of the fixed mindset questions showed a change in score. The largest change (-2) indicated that following the study abroad experience, Student 6 was more likely to participate in activities independently. Student 6 also showed a negative change (-1) on the question pertaining to viewing failure as a negative thing, indicating that following her study abroad experience, she was less likely to view failure as a negative. Alternatively, Student 6 rated an increase in score (+1) on two of the questions, indicating that following her study abroad experience, she was extremely likely to only do something she had previous success in doing, and making a plan and following through with it. Survey data for Student 6 can be found in Table 8.

Student 7 indicated high ratings (4-5) for the pre-survey growth mindset questions. These ratings indicate that prior to studying abroad, she was somewhat or extremely likely to engage in growth mindset behaviors. These high scores were maintained on the post-survey growth mindset questions. These ratings indicated that Student 7 was just as likely to engage in growth

mindset behaviors regardless of her study abroad experience. Prior to the study abroad trip, Student 7 reported low ratings (2-3) on three out of four fixed mindset questions. A rating of 2 indicated that she was not very likely to do something she had no previous success in doing, and a rating of 3 indicated that her willingness to view failure as a negative thing and her willingness to only do things if there were others to do it with her were dependent on the situation prior to her study abroad experience. Following the study abroad experience, all but one of these ratings were maintained. Student 7 indicated a negative change (-1) demonstrating that following the study abroad experience, she would be more likely to engage in activities independently. Survey data for Student 7 can be found in Table 9.

Student 8 reported high ratings (3-5) on the pre-survey growth mindset questions. A rating of 3 indicated that Student 8's willingness to do something she had no previous experience in doing was dependent on the situation. A rating of 4 indicated that she was somewhat likely to research other cultures when it was not a requirement, and a rating of 5 indicated that she was extremely likely to focus on a goal until it was accomplished. Following the study abroad experience, higher scores (4-5) on these items were reported. This indicated that Student 8 was more likely to demonstrate a growth mindset on all items following her study abroad experience. Student 8 reported high scores (3-5) on the pre-survey fixed mindset questions. All but one of the fixed mindset ratings were maintained on the post-survey fixed mindset questions. The only response that showed a change (-1) pertained to the question regarding only doing something you have had previous success in doing. The negative change in response indicated that following her study abroad experience, Student 8 was more likely to do something she had not had previous success in doing. Pre- and post-survey response data for Student 8 can be found in Table 10.

Discussion

This study sought to determine whether mindset changes as a result of a short-term study abroad experience. Participants for the study included eight graduate and undergraduate students enrolled in the CSD British Isles short-term study abroad program at ISU. Participants were all enrolled in an independent study that met monthly beginning in December in order to complete activities related to their study abroad prior to the trip. Data for the study were collected through the use of a pre- and post-survey consisting of seven questions designed to examine where students fell along the mindset continuum (i.e., fixed vs. growth). Completion of the mindset presurvey was one such activity completed prior to departure. Post-surveys were completed within 2 weeks following the study abroad trip. Questions for the survey were written to balance both fixed and growth mindset in order to ensure that students were not automatic in their responses. Data for the study were analyzed using Microsoft Excel and findings were grouped into three sections: group responses for growth mindset questions, group responses for fixed mindset questions, and individual trends. Group findings from the study indicated that, following the study abroad experience, responses to all growth mindset questions increased in rating. This indicated that participants were more likely to take a growth mindset perspective following their study abroad experience. Findings also suggested that responses to all fixed mindset questions either decreased in score or stayed the same following the study abroad experience. Findings also suggested that half of the participants demonstrated a fixed mindset perspective prior to their study abroad experience, however, post-survey responses showed that they had changed their responses to be aligned with a growth mindset perspective following their study abroad experience.

Findings from group response data indicated that all growth mindset questions increased in rating following the study abroad experience. This finding may indicate that due to the study abroad experience, participants would be more likely to take a growth mindset perspective. Though pre-survey group responses were already moderately high in rating (2.5-4.5) they were even higher (3.5-5) following the study abroad experience. This may indicate that due to the short-term study abroad, students would be even more likely to demonstrate a growth mindset perspective. These findings are consistent with the results drawn from DuViver and Patitu (2017), which indicated that short-term study abroad can have a multitude of benefits for the students who choose to participate. Additionally, Geyer, et al. (2016) found that the length of time spent abroad did not significantly impact the positive outcomes of the study abroad experience. The mindset of the students in this study were able to be changed in 10 days.

Additional findings from group response data indicated that responses to fixed mindset questions either decreased in rating or stayed the same between pre- and post-survey responses. Though the range of pre- and post-survey group responses were the same (3-5), the changes were unique to each question. This may indicate that due to the study abroad experience, students were less likely to take a fixed mindset perspective dependent on the situation. This finding may be related to the findings discussed in Sriram (2014), which indicated that certain interventions may cause mindset to shift along the continuum. In addition, Gullekson and Tucker (2013) found that a short-term study abroad experience may cause an increased level of emotional intelligence. These findings may be related to the findings of the present study in the sense that an increased level of emotional intelligence may cause a decrease in a students' ability to take a fixed mindset perspective.

Further outcomes showed that half of the participants demonstrated a predominantly fixed mindset prior to studying abroad. Following their study abroad experience, they all showed a noticeable increase in ratings, shifting their mindset score in at least 75% of survey questions. This finding may indicate that the reason for the change from a fixed mindset to a growth mindset was due to their study abroad experience. This finding may be related to the results found Dwyer (2002), which stated that students who spent time abroad through an organized study abroad program were more likely to learn about other cultures and more likely to have increased self-confidence following their study abroad experience. Further support for this finding includes a research study conducted by Degraaf, et al. (2013), which found that participants that had studied abroad within the last 10 years demonstrated increased social skills and intercultural curiosity as a result of their study abroad experience.

Limitations of this Study

There were several limitations to the current study. First, the sample size of survey respondents was limited. The potential participant size was 22; however, only 8 participants granted consent to use their survey responses in the study. If all potential participants had granted consent, the study may have yielded different results. The construction of the survey also served as a potential limitation of the study. Though care was taken to word the survey in a way that balanced both growth and fixed mindset perspectives, there was one question that was grouped with the fixed mindset questions that appeared to be more of a growth mindset question, which may have skewed the results. In addition, there was no published survey on mindset, so the student researcher created one instead. Despite best attempts, there were still challenges related to the total number of questions to include as well as the wording of the questions.

Implications

Future research may be beneficial to examine how mindset may change across more than one study abroad trip. The CSD department at ISU offers at least one study abroad trip per academic year, so there is opportunity for CSD students to participate in more than one short-term study abroad experience while they enrolled. This may impact the outcomes based on the total number of study abroad experiences the participant has engaged in.

Future research may also examine how mindset changes in students enrolled in different academic programs within ISU. Additionally, it may be interesting to compare how mindset changes in CSD students compared to students seeking a different academic degree. Study abroad experiences will continue to engage college students in international experiences, and it is important to understand all of the life-changing impacts that this time abroad can have on students.

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Table 1
Growth Mindset Question Table: Group

	Pre	Post
Do something you have no experience in doing?	2.5	3.5
Research other cultures when it is not a requirement?	4	4.5
Focus on a goal until it's accomplished?	4.5	5

Table 2
Fixed Mindset Question Table: Group

	Pre	Post
Only do something you have had previous success in doing?	3.5	3
Only do something you have had previous success in doing?	3.5	3.5
View failure as a negative thing (mistake)?	3	2.5
Make a plan and follow through with it?	5	5

Table 3
Student 1: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	3	3	0
Research other cultures when it is not a requirement?	4	4	0
Focus on a goal until it's accomplished?	5	5	0

Student 1: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	2	2	0
Only do something you have had previous success in doing?	3	3	0
View failure as a negative thing (mistake)?	3	2	-1
Make a plan and follow through with it?	5	5	0

Table 4
Student 2: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	2	3	+1
Research other cultures when it is not a requirement?	2	3	+1
Focus on a goal until it's accomplished?	4	5	+1

Student 2: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	5	4	-1
Only do something you have had previous success in doing?	5	5	0
View failure as a negative thing (mistake)?	4	3	-1
Make a plan and follow through with it?	3	5	+2

Table 5
Student 3: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	3	4	+1
Research other cultures when it is not a requirement?	2	4	+2
Focus on a goal until it's accomplished?	5	5	0

Student 3: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	4	3	-1
Only do something you have had previous success in doing?	4	4	0
View failure as a negative thing (mistake)?	4	3	-1
Make a plan and follow through with it?	5	5	0

Table 6
Student 4: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	3	4	+1
Research other cultures when it is not a requirement?	2	4	+2
Focus on a goal until it's accomplished?	4	5	+1

Student 4: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	4	3	-1
Only do something you have had previous success in doing?	4	3	-1
View failure as a negative thing (mistake)?	4	2	-2
Make a plan and follow through with it?	4	5	+1

Table 7
Student 5: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	3	4	+1
Research other cultures when it is not a requirement?	4	4	0
Focus on a goal until it's accomplished?	5	5	0

Student 5: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	4	5	+1
Only do something you have had previous success in doing?	3	3	0
View failure as a negative thing (mistake)?	2	2	0
Make a plan and follow through with it?	5	5	0

Table 8
Student 6: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	2	4	+2
Research other cultures when it is not a requirement?	1	4	+3
Focus on a goal until it's accomplished?	4	5	+1

Student 6: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	4	5	+1
Only do something you have had previous success in doing?	4	2	-2
View failure as a negative thing (mistake)?	4	3	-1
Make a plan and follow through with it?	4	5	+1

Table 9
Student 7: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	5	5	0
Research other cultures when it is not a requirement?	4	4	0
Focus on a goal until it's accomplished?	5	5	0

Student 7: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	2	2	0
Only do something you have had previous success in doing?	3	2	-1
View failure as a negative thing (mistake)?	3	3	0
Make a plan and follow through with it?	5	5	0

Table 10
Student 8: Growth Questions

	Pre	Post	Difference
Do something you have no experience in doing?	3	4	+1
Research other cultures when it is not a requirement?	4	5	+1
Focus on a goal until it's accomplished?	5	5	0

Student 8: Fixed Questions

	Pre	Post	Difference
Only do something you have had previous success in doing?	5	4	-1
Only do something you have had previous success in doing?	4	4	0
View failure as a negative thing (mistake)?	3	3	0
Make a plan and follow through with it?	5	5	0

Appendix A

Pre-Study Abroad Mindset Survey

Please answer each q	uestion with a scor	e of one through	five.
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- 1- Not at all likely
- 2- Not very likely
- 3- It Depends
- 4- Somewhat likely
- 5- Extremely likely

How likely are you to...

1.	Only do something you have had previous success in doing?
2.	Do something you have no experience in doing?
3.	Do something only if there are others to do it with you?
4.	View failure as a negative thing (mistake)?
5.	Make a plan and follow through with it?
6.	Research other cultures when it is not a requirement?
7.	Focus on a goal until it's accomplished?

Post Study Abroad Mindset Survey

Please answer each question with a score of one through five.
1-Not at all likely
2-Not very likely
3-It Depends

4-Somewhat likely 5-Extremely likely

After studying abroad, how likely are you to...

1.	Only do something you have had previous success in doing?
2.	Do something you have no experience in doing?
3.	Do something only if there are others to do it with you?
4.	View failure as a negative thing (mistake)?
5.	Make a plan and follow through with it?
6.	Research other cultures when it is not a requirement?
7.	Focus on a goal until it's accomplished?

Appendix B

Hello everyone,

I would like to conduct a research study using the assignments that we completed for our study abroad program. If you give me permission, I will use your surveys that were used for class credit to examine the impact of study abroad on mindset.

Your participation includes the use of your pre and post survey that were completed for course credit for your independent study, as well as completion of the informed consent form attached. Participation is voluntary and will in no way impact the overall grade you will receive for your independent study. All Participants will be given a code in place of their name to keep responses completely anonymous. No identifying information will be dispersed, making it impossible for responses to be connected back to you. There are no risks involved in this survey. You may choose not to participate, this would mean answering no on the consent form attached. In order to participate, please submit your completed consent form to me by March 31st, 2019. Any questions regarding this study can be directed to Dr. Heidi Harbers, Department of Speech Language Pathology and Audiology, 438-5309, hmharbe@ilstu.edu. Also, the Research Ethics & Compliance Office at Illinois State University, (309) 438-2520, Campus Box 3330, 310 Hovey Hall may be contacted with questions concerning participants' rights in this research project.

Thank you,

Anya Rowe Graduate Student – Speech Language Pathology Illinois State University Akrowe1@ilstu.edu

Appendix C



Participant Consent Form

You are being asked to participate in a research study conducted by Anya Rowe under the supervision of Dr. Heidi Harbers of the Communication Sciences and Disorders Department at Illinois State University. The purpose of this study is to examine how mindset changes following a short-term study abroad experience.

Why are you being asked?

You have been asked to participate because you recently participated in the CSD British Isles short-term study abroad experience. You are ineligible to participate if you are under the age of 18. Your participation in this study is voluntary. You will not be penalized if you choose to skip parts of the study, not participate, or withdraw from the study at any time.

What would you do?

If you choose to participate in this study, you will be asked to provide consent for the PI and co-PI to access your pre- and post-surveys you completed for your independent study.

Are any risks expected?

We do not anticipate any risks beyond those that would occur in everyday life.

Will your information be protected?

The information that we will use will be anonymous. To ensure that your responses are not tied to your identity, you will be asked to provide a unique four-digit code to anonymously connect your pre- and post-surveys. The first two digits being the month of your birth, and the last two digits being the last two digits of your home address. The findings from this study may be presented in conferences, meetings, and publications. When these findings are presented, your responses will be combined with the responses of other participants.

Who will benefit from this study?

While you may not directly benefit from this study, your responses may help the program and curriculum coordinators in the Department of Communication Sciences and Disorders as they plan future CSD study abroad trips.

Whom do you contact if you have any questions?

If you have any questions about the research, contact Anya Rowe at akrowe1@ilstu.edu or Dr. Heidi Harbers at hmharbe@ilstu.edu

If you have any questions about your rights as a participant, or if you feel you have been placed at risk, contact the Illinois State University Research Ethics & Compliance Office at (309) 438-5527 or IRB@ilstu.edu.

Please keep this consent form for your records

Documentation of Consent
Check the box below if you are willing to participate. If you do not want to participate, you can
close the survey.
☐ I am 18 or older. I give my consent to use my pre and post survey.
☐ I am 18 or older. I do NOT give my consent to use my pre and post survey.
Printed Name:
Signature:
In order to keep this survey anonymous, please create a four-digit code to anonymously connect your pre- and post-surveys. The first two digits being the month of your birth (e.g., January= 01), and the last two digits being the last two digits of your home address.