

## Students' Global Mindedness and Cultural Sensitivity: Examining the Implications of a Semester at Sea Study Abroad Voyage

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As globalization increases and the international community moves toward greater interdependence, international learning experiences have become a core educational value for many American universities. Although there are various approaches to study abroad programming, the Semester at Sea (SAS) voyage is an understudied global education program. Using a sample of college students ( $N = 73$ ), the present study examined differences between the cultural sensitivity and global mindedness scores of students prior to starting the SAS voyage and at the culmination of the voyage. The findings demonstrate significant increases in both global mindedness and cultural sensitivity at the completion of the program and support the positive role of cultural immersion experiences in student growth. Recommendations for future research and study abroad programming are also discussed.

International education has become one of the core educational values and missions of many American universities. As globalization increases, the international community is moving toward greater interdependence. As a result, institutions of higher education have an increased focus on preparing their students for the global work force (Wang, Peyvandi, & Coffey, 2014). One of the ways that colleges and universities have approached this is by providing global education opportunities for their students through study abroad programs.

Study abroad is a complex and dynamic topic with many implications for students, faculty members, administrators, and people in general as the world becomes more globalized (Harrell, Sterner, Alter & Lonie, 2017). Moreover, the American Association of Colleges and Universities recognizes the importance of global and international learning and has advocated for its integration into the academic curriculum (Hovland, 2009). Study abroad programs have diverse and far-reaching impacts. Overall, these global learning experiences have been found to increase students' curiosity and appreciation for diversity, global awareness, and self-awareness (Young, Natrajan-Tyagi, & Platt, 2015).

As globalization increases, one of its most salient effects has been increased travel and the migration of individuals (Mapp, 2012). In the future, the number of Americans working in foreign countries will continue to increase (Salacuse, 1998; Santoro, 2009). Moreover, an increasing number of universities, organizations, companies, and social service agencies acknowledge the importance of cultural experiences in an international setting (Brandenberg et al., 2014; Kagan & Stewart, 2004; Al-Krenawi & Graham, 2000; Metzger, 2006; Xu, de Silva, Neufeldt & Dane, 2013).

A survey of the existing empirical scholarship demonstrates that study abroad programs result in students being more global minded (Clarke III, Flaherty, Wright, & McMillen, 2009; Redwine, Wagner, Rutherford, & Wingenbach, 2018; Take & Shoraku, 2018; Vandermaas-Peeler, Duncan-Bendix, & Biehl,

2018). These programs can also lead to students being more culturally and internationally aware (Harrell et al., 2017; Redwine et al., 2018; Senzaki, McChesney, Schwenj, & Steele, 2018; Williams, 2005). Furthermore, study abroad programs encourage student empathy and maturity while enhancing both critical thinking skills and problem-solving skills (Farell & Suvedi, 2002).

There are different types of study abroad programs spanning from two weeks to a year. Study abroad programs can be defined as all educational programs that take place outside the geographical boundaries of a students' country of residence. A majority of study abroad programs in the social sciences involve a combination of course work, visits to NGOs, government organizations, social service agencies, orphanages, museums, schools, involvement in cultural activities, experiential activities and tours (Medora & Roy, 2017). However, the Semester at Sea (SAS) voyage program stands out as different from other study abroad approaches. More specifically, SAS includes students and faculty from multiple countries across the world on a semester long voyage at sea, stopping at several ports around the world to provide a rich global learning experience for the students. Although there are no other study abroad opportunities like it, there has been little empirical research done to assess the impact that SAS has on students' professional and personal development.

Traditionally, the success and effectiveness of study abroad programs have been assessed by measuring increases in students' levels of cultural sensitivity (Anderson, Lawton, Rexeisen, & Hubbard 2006; Gullekson, & Tucker, 2012; Li, 2013; Lumkes, Hallett, & Vallade, 2012; Wang et al., 2014) and global mindedness (Li, 2013; Lumkes, et al., 2012; Wang et al., 2014) at the end of the program. Both of these outcomes have implications not only for a students' academic success but also for a number of positive personal and interpersonal developmental outcomes (Li, 2013; Lumkes et al., 2012; Wang et al., 2014). In a general sense, cultural sensitivity consists of accepting cultural

differences without thinking that one's culture is superior and preferred to other cultures. Cultural sensitivity also includes being open, adaptive, flexible, and accepting of different values, attitudes, beliefs, and practices. According to Straffon (2003), intercultural sensitivity describes a person's response to cultural differences and varied perceptions of people from other cultures. Educators argue that students need to be equipped with this kind of cultural knowledge, skills, and expertise in order to effectively interact with and work with people from different countries (Anderson et al., 2006).

In terms of global mindedness, Hett (1993) defined it as having an ecological perspective of the world that promotes the unity and interdependence of humans and believing in universal human rights. Hett (1993) specifies that global-minded people perceive themselves connected to the world community and are aware of their responsibility for its members. Reysen and Katzarska-Miller (2013) describe global citizens as individuals who possess awareness and caring; promote cultural diversity, social justice, and sustainability; and have internalized a responsibility to act.

Based on the increasing relevance of study abroad programs and the implications that study abroad can have on the personal and professional development of students, it is imperative to continue to identify the high impact practices that are associated with the success of study abroad experiences. Moreover, while some study abroad experiences have received a great deal of scholarly attention, there are other programs that are under-studied.

Thus, the primary objective of this study is to examine whether there are significant changes in the global mindedness and cultural sensitivity scores of students enrolled in a Semester at Sea (SAS) study abroad program. More specifically, assessing these constructs before the SAS voyage and after the completion of the program will provide important insights into program effectiveness. Furthermore, if the SAS program is effective at significantly changing students' cultural sensitivity and/or global mindedness, there should be greater emphasis on these types of educational experiences in higher education, and a greater amount of resources should then be channeled into such programs. The present study seeks to address an important gap in the extant research while generating knowledge of the ways in which students are impacted by particular study abroad experiences.

## Literature Review

Study abroad falls into the category of high-impact practices that enhance students' learning outcomes related to diversity and global learning (Kuh, 2008). Study abroad encourages students to experience an interconnected world and embrace differences rather

than cling to ethnocentric values and beliefs, and it highlights for the students the collective heritage of human beings (Mulvaney, 2017). Furthermore, it encourages frequent contact and interactions with the faculty mentor and native people from place(s) they are visiting, contacts with their classmates, professors, and guest speakers who are likely to be from different backgrounds. Scholars propose, "Through global learning, students should (1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, (2) seek to understand how their actions affect both local and global communities, and (3) address the world's most pressing and enduring issues collaboratively and equitably" (Hovland, 2014, p.6-7).

Munoz, Wood, and Cherrier (2006) contended that teaching about cultural sensitivity and global mindedness in a traditional classroom can be challenging because students need more "concrete experiences" with other cultures to actually prepare them to function in the complex, global environment. For example, these scholars state the following:

Although an intercultural exposure could be attained within a single country, extending the classroom beyond the conventional campus setting to include an actual international encounter with other people and cultures has long been recognized as a valuable educational practice. The intercultural benefits of student engagement through experiential international encounters lead Schuster et al. (1998) to specify that one really needs to visit a country to understand it (p.173).

Achieving the aforementioned goals can be difficult in a traditional classroom as developing and instilling interculturalism requires that students engage in concrete experiences with other cultures. Although there are a number of study abroad programs, Semester at Sea (SAS) utilizes a unique context for cultural immersion and experiential learning.

Douglas and Jones-Rikken (2001) reported using a control group to study in order to examine the effectiveness of their study abroad programs. The students in the experimental group participated in the study abroad program while the students in the control group had no such experience. Their findings indicated that students in the experimental group were more world-minded and developed a view of the world that was less ethnocentric. Other researchers have found that participating in these programs can increase students' global competencies (Li, 2013), change students' outlook on global and political issues (Lumkes et al., 2012), enhance students' global leadership skills (Montgomery & Arensdorf, 2012), facilitate students' intercultural growth (Gullekson & Tucker, 2012), and increase the students' interests in further study abroad (Wang, Peyvandi, & Moghaddam, 2009).

Socioeconomic factors often influence students' decisions to study abroad. Horn, Jerome, and White (2008) specified that students coming from families who belonged to the upper-middle class or higher socio-economic statuses were more likely to engage in study abroad programs. As anticipated, students listed finances as the most important factor that affected their decision to study abroad (Lee, 2014). Therefore, it is not surprising to learn that students from low socioeconomic class are less likely to engage in study abroad opportunities (Schnusenberg, de Jong, & Goel, 2012). Likewise, Whatley (2017) concluded that generally, student loans negatively influenced the likelihood of a student studying abroad, but grant aid increased the chances of students studying abroad. Whatley (2017) also found that students with lower levels of expected family contribution were less likely to participate in study abroad programs. Those with greater financial need are also less likely to study abroad.

Most students who participate in short-term study abroad programs are interested in obtaining more information and understanding about the host country (Pederson, Skidmore, & Aresi, 2014). These students have also been found to be involved in clubs and organizations that focus attention on international topics before they leave for the program (Pederson et al., 2014). Furthermore, they also tend to work in fields that focus on international affairs (Lane-Toomey, & Lane, 2013). Lane-Toomey and Lane (2013) also found that students with previous travel experience within the U.S. and internationally, were more likely to study abroad.

### **The History and Structure of SAS**

The Semester at Sea (SAS) study-abroad program differs from many other study-abroad program because the entire program is conducted on a ship for the duration of a semester. The ship circumnavigates the world and makes 4 to 5 day stops at different ports; totaling 10 to 12 ports in one semester. The objective of the SAS program is to encourage students to become more globally aware and to appreciate the similarities, uniqueness, and cultural diversity of each country they visit. The mission of the SAS program is to educate individuals with global understanding necessary to address the challenges of the interdependent world and appreciate cultural heterogeneity. With the world serving as the classroom, the program integrates multiple-country study, interdisciplinary coursework, and experiential learning for meaningful engagement in a global community (Multi-Country Study Abroad, 2020). Typically, SAS has approximately 650 undergraduate students on the ship during one semester, and they come from approximately 280 universities worldwide. There are two voyages a year, one in spring and one in fall.

The Semester at Sea program has as part of its mission statement a commitment to foster and enhance a shipboard community that includes all ethnic, national, and sexual identities ([https://www.sas.com/en\\_us/company-information/diversity.html](https://www.sas.com/en_us/company-information/diversity.html)). The foundation of every SAS voyage is the diversity of people from different ethnic and international backgrounds, their varied perspectives, and the culture of the places the students are likely to visit. The SAS program aims to create an inclusive, welcoming, shipboard culture that facilitates a unified, compassionate, and empathic community valuing all people and perspectives (<https://www.semesteratsea.org/life-at-sea/diversity/>).

The entire SAS study abroad program is conducted on a cruise ship that has been converted into a floating and functional university. The ship has a student union, a library, a swimming pool, lounges, basketball arenas, dining rooms, and several classrooms. Since the inception of the program in 1963, the program has served 75,000 undergraduate students. During the spring and fall semesters, students have classes for 100 to 110 days while they circumnavigate the world. The Semester at Sea program itineraries are built around international challenges, trends, issues, and international theme. The M.V. World Odyssey serves as a traveling home and university campus. The program strives to give an in-depth meaning to cultural immersion and cultural diversity, experiential learning, and a sense of international community (Multi-Country Study Abroad, 2020).

Students attend classes in a variety of disciplines while the ship sails at sea. Approximately 20 to 25 classes in different academic disciplines are offered. Each course has an in-depth in-country "Field Class" component for 8-10 hours a day that the students are required to take with every course they take. The classes offered most frequently are those are in liberal arts, humanities, life span human development, music, fine arts, economics, geography, history, English literature and writing, theater, and business. It is mandatory that all students take an interdisciplinary core course entitled "Global Studies". This course is considered as a core class for the Semester at Sea program because it provides an integrated and interdisciplinary introduction to each country visited on the itinerary. The course examines a brief history of each country that they are about to visit, including information regarding traditional and changing political systems, cultural traditions, customs, and values. This is done to prepare the students for field activities in the country where the ship docks.

The Global Studies course is expected to assist students to expand their understanding of world cultures and life in the selected countries on the itinerary. As part of this program students are

encouraged to think critically about their own societies and global change. Specifically, pre-and post-port lectures are held to better explain to the students both intercultural competency and global understanding.

The sponsoring university appoints the Dean from among the most accomplished faculty, oversees the curriculum, and approves the course syllabus for the Semester at Sea program. At the core of the Semester at Sea experience are 22 to 25 global-minded, knowledgeable, experienced, student-oriented educators who are passionate about international education. The educators engage the students in shipboard courses in combination with field classes that involve experiential learning and cultural immersion experiences.

Prior to arriving at port, students receive a pre-port briefing regarding the culture and cultural milieu of the country that they are about to visit. Upon arriving at the Port of Call, a special guest speaker who could be a community leader, someone from the American embassy or the American ambassador presents a lecture to the students and faculty. This prepares the students for what to expect in the country that they are about to visit. While the ship docks at various ports, no classes take place. Students are encouraged to travel on the Semester at Sea-sponsored excursions or participate in independent travel within the country. Travel outside the country where the ship is docked is strictly prohibited.

### **Empirical Assessments of SAS**

Since the inception of this program in 1963, there are only five published studies on how the SAS program influences the lives of students. Caton and Santos (2009) commented that investigating the program further and studying the impact of the SAS program would be fruitful because its itinerary includes many destinations. More research is definitely needed to highlight how the SAS program is different from other study abroad programs, as well as how students benefit from participating in this program. Again, the SAS program is a non-profit global education study abroad program that emphasizes cross-cultural interaction and understanding between program participants and their international hosts.

As part of the SAS program, the students have direct contact with people and the cultures of the country they visit. These programs afford the opportunity to develop cross-cultural understanding of human commonalities and global interdependence while recognizing and respecting individual potentials and cultural diversities. The Institute's approach to international and cultural education provides the framework for a lifetime of learning, concern and commitment to others (Multi-Country Study Abroad, 2020).

McCabe (1994) was the first researcher to publish research findings on the impact of the SAS program on the

participants. Although McCabe's (1994) work provided empirical insight into the impact of the SAS program, the sample was small, the methodology was unclear, and the results lacked clarity. The initial sample for the study included 23 students, which was then reduced to fourteen focal group members. Qualitative analyses were used, including participant observations, interviews, and student journaling. The students were asked what if anything that they experienced as part of SAS voyage assisted them to create a global perspective. Data were coded according to five thematic dimensions: (1) fear versus openness; (2) people being the same or different versus people being the same and different; (3) naivety versus cross-cultural knowledge and understanding; (4) pro or anti-Americanism versus pro and anti-Americanism; (5) ethnocentrism versus global centrism. The results of this study indicated that initially the students were apprehensive and fearful when the voyage started, but the students' attitudes shifted when they experienced new countries and cultures. For all the respondents, the degree of "openness" increased as the voyage progressed.

For the second dimension, students were asked their opinions about people from other cultures being the same and/or different as Americans. At the start of the voyage, only three students saw people in the world as both the same and different. At the end of the voyage, however, a majority of the students saw people in the world as both the same and different, thus recognizing the differences that exist between cultures.

The results further suggest that as the voyage progressed, for the third dimension, students did not think that they were naive in understanding different cultures. More specifically, they mentioned that they were able to better comprehend cultural differences. Additionally, some students stated that they became more interested and aware of world events. For the fourth dimension, whether the students had pro- or anti-American attitudes or pro- and anti-American attitudes, the students expressed strong attitudes and feelings with regard to nationalism as they started their voyage and the SAS program. By the end of the voyage, most students viewed Americanism on a broader scale, and they were able to see both the positive and negative aspects. The last dimension was to measure ethnocentrism versus global centrism. Global centrism implies looking at issues from the standpoint of a citizen of the world, rather than looking at the world from a singular perspective. At the conclusion of the voyage, all the students had become more global centric. McCabe (1994) elaborated that the course work that students took on this ship, the in-port experiences, and field classes could possibly have contributed to the students being more tolerant and global minded.

Finally, as part of the same study, McCabe (1994) remarked that the students' own prior travel

experiences, their experiences in the “ports of call”, the lectures given by the inter-port lecturers, and informal conversations with faculty members on board, may have also helped to enhance the students’ global perspective. Students consistently described the port experiences and the field classes as the most meaningful aspects of the SAS program in terms of contributing to the development of a global perspective. The students’ sense of global mindedness increased with the progression of the voyage and each “Port of Call” that they visited had repeated exposure to diverse people, cultures, and situations.

Dukes (2006) conducted a 22-year follow-up study with students who had participated in the SAS program during their college years. He interviewed 29 participants by phone and mail to see what type of impact the SAS program had on their lives 22 years later when these respondents were in their middle adulthood years. The respondents answered the questions relating to the outcomes of the SAS program and completed the Crumbaugh’s Purpose in Life test. The results indicated that the participants still had a high global perspective and high purpose in life test scores 22 years after they had completed the SAS voyage. Many of them had continued to travel internationally during the 22 years. A majority of them indicated that the voyage gave them a more accurate worldview and a more balanced world perspective. In short, Dukes (2006) concluded that as a group, former participants of the Semester at Sea program were doing well as indicated by the high *Purpose in Life* scores and positive open-ended responses. Many respondents were still drawing on experiences from 22 years ago, from the voyage. Dukes (2006) concluded that the Semester at Sea experience served as a springboard for enduring personal growth.

### Global Mindedness and Cultural Sensitivity

Douglas and Jones-Rikkens (2001) concluded that students who participated in a study abroad program were more global minded than the control group who had no international travel experience. Their results further suggested that the greater the cultural difference between the host and home cultures, the higher the global mindedness scores tended to be. Similarly, Zhai and Scheer (2002) found that students who had more contact with people from other countries had higher levels of global mindedness.

Zorn (1996) concluded that the length of the study abroad program also influenced the extent of global mindedness in students with longer programs resulting in greater levels of global mindedness. Kehl and Morris (2008) in their study on nursing students found that males tended to be more global minded than females. These researchers also found that participants who reported their

parents’ annual income to be over \$100,000 had lower global minded scores (Kehl & Morris, 2008).

The concepts of cultural sensitivity and global mindedness have been studied in previous research using smaller samples and mostly with students who visited one locale for the entire study abroad program. However, these constructs have not been empirically investigated in larger samples of students who have participated in programs like the SAS program visiting multiple destinations.

### Objectives

Students enrolled in the Semester at Sea (SAS) program, engage in cross-cultural immersion experiences when they participate in their field classes and regular SAS excursions. More specifically during the field classes, the students are encouraged to spend time with local host families, visit schools, have meals with families, mingle with college students, and engage in service-learning projects that require extensive interactions with the local people. Consequently, it is expected that the overall gain in cultural sensitivity and global mindedness will be significant because of these SAS experiences. Therefore, the present study is a descriptive study to investigate if students experienced significant gains in cultural sensitivity and global mindedness during the SAS program. As a result, the following research questions were developed to guide and examine the impact of SAS on participants.

1. Is there a significant difference between the cultural sensitivity scores of the students prior to starting the voyage and at the culmination of the voyage?
2. Is there a significant difference between the global mindedness scores for the students prior to the initiation of the program and the end of the program?

In this global and interconnected society, it is important and practical for professionals to be global-minded and to have intercultural proficiency. They need to be open to diversity and possess an understanding of intercultural communication. The objectives of the present study add to our understanding of how to cultivate these critical skills in college students and new professionals.

### Method

#### Procedures and Participants

The present study took place on a semester at sea voyage where students spent a semester visiting several countries across the world, including Mexico, Hawaii, Japan, China, Vietnam, Cambodia, Myanmar, India,

Table 1  
*Global Mindedness Scale*

Global Mindedness Statements
I often think about the kind of world we are creating for future generations.
Americans can learn something of value from all different cultures.
It is very important to me to choose a career in which I can have a positive effect on quality of life for future generations.
The United States is enriched by the fact that is comprised of many people from different cultures and countries.
It is important that American universities and colleges provide programs designed to promote understanding among students of different ethnic and cultural backgrounds.
In the long run, America will probably benefit from the fact that the world is becoming more interconnected.
I enjoy trying to understand people's behavior in the context of their culture.
I generally find it stimulating to spend an evening talking with people from another culture.
I think of myself, not only as a citizen of my country, but also as a citizen of the world.
My opinions about national policies are based on how those policies might affect the rest of the world as well as the United States.
The needs of the United States must continue to be our highest priority over needs of other countries.*
I feel an obligation to speak out when I see our government doing something I consider wrong.
I think my behavior can impact people in other countries.
The fact that a flood can kill 50,000 people in Bangladesh is very depressing to me.
I am able to affect what happens on a global level by what I do in my own community.
I feel very concerned about the lives of people who live in politically repressive regimes
When I hear that thousands of people are starving in an African country, I feel very frustrated.
When I see the conditions some people in the world live under, I feel a responsibility to do something about it.
I sometimes try to imagine how a person who is always hungry must feel.
Americans have a moral obligation to share their wealth with the less fortunate people of the world.
I sometimes feel irritated with people from other countries because they don't understand how we do things here.*
I feel a strong kinship with the worldwide human family.
I have very little in common with people in underdeveloped nations.*
The present distribution of the world's wealth and resources should be maintained because it promotes survival of the fittest.*
American values are probably the best.*
Americans should be permitted to pursue that standard of living they can afford it only has a slight negative impact on the environment.*
Really, there is nothing I can do about the problems in the world.*
It is not really important to me to consider myself as a member of the global community.*
Generally, an individual's actions are too small to have a significant effect on the ecosystem.*

\*Negatively worded items that were reverse coded when calculating the overall mean

South Africa, Ghana, Morocco, and Germany. The student participants included in this study ( $N = 73$ ) were 18–23 years of age ( $M = 20.23$ ,  $SD = 1.09$ ), were mostly female ( $n = 63$ , 87%) with 10 students identifying as males (13%). Most students self-identified as white ( $n = 52$ , 71%), with smaller portions of the participants identifying as Asian ( $n = 8$ , 11%), Hispanic ( $n = 5$ , 7%), and two or more races ( $n = 5$ , 7%). Two additional students self-identified as Black, and a final student self-identified their ethnicity as Pacific Islander. Over 60 percent of the participants in this study were born in the United States, and all participants indicated that they had previous experience traveling abroad. Although there were students at various levels of their academic careers in this sample, the majority of students were juniors ( $n = 34$ , 47%), an additional 16 (22%) students were sophomores, 15 (21%) were seniors, and one (1%) was a freshman. The remaining seven students indicated their year in school as “other”. This study was conducted with the approval and permission from the IRB board of one of the university partners and the permission of the Academic Dean of the SAS program.

Data for this study were collected from a survey administered at two time points over the semester. The initial survey was administered in January at the beginning of the voyage, and the second survey was administered at the end of the voyage. Both surveys consisted of the same demographic questions regarding race/ethnicity, age, major and GPA, questions regarding past international travel experiences, and measures of participants’ global-mindedness and cultural sensitivity. Students completed the pre- and post-study abroad surveys as part of their course assignments and received points towards their final grade.

### Measures

#### Global Mindedness

An adapted version of Hett’s (1993) Global Mindedness scale as reported in Zhai and Scheer (2004) was used. This 29-item instrument uses a 6-point Likert-type response category ranging from 1 (very strongly disagree) to 6 (very strongly agree). The 29-item scale was used to create a composite score of global-mindedness for both Time-1 and Time-2. Eight of the 29 items on the scale were negatively worded, thus we reverse coded those items when calculating the overall mean. With the reverse coding, higher scores indicated greater global-mindedness and a lower response indicated less global-mindedness. For example, one item on the scale states “The needs of the United States must continue to be our highest priority over needs of other

countries,” so these items were reverse coded such that a 1 = very strongly agree, and a 6 = very strongly disagree. The internal reliability, using Cronbach’s coefficient alpha, was 0.89 for the overall tool and alphas for the five subscales ranged from 0.47–0.66.

#### Cultural Sensitivity

Stanley’s (1996) Attitudes towards Cultural Diversity and Pluralism Scale was used to measure students’ cultural diversity attitudes. This was a 19-item scale ( $\alpha = 0.95$ ) with a 6-point Likert-type response category ranging from 1 (very strongly disagree) to 6 (very strongly agree). The 19-item scale was used to create a composite score of cultural sensitivity for both Time-1 and Time-2. Six of the 19 items on the scale were negatively worded, and thus were reverse coded when calculating the overall mean. With the reverse coding, higher scores indicated greater cultural acceptance while a lower numeric response indicated less cultural acceptance. For example, one item on the scale stated, “I am uncomfortable around students whose ethnic heritage is different from my own,” so the response category for this item was reverse coded such that a 1 = very strongly agree, and a 6 = very strongly disagree. The internal reliability, using Cronbach’s coefficient alpha, was 0.95.

### Results

#### The Influence of an SAS

To test the objectives regarding the influence of an SAS on students’ cultural sensitivity and global mindedness scores respectively, a dependent sample t-test was performed. The pre-test cultural sensitivity mean ( $M = 5.34$ ,  $SD = 0.49$ ) and post-test cultural sensitivity mean ( $M = 5.43$ ,  $SD = 0.48$ ) were significantly correlated at  $r = .72$ ,  $p < .001$ . The pre-test global mindedness mean ( $M = 4.74$ ,  $SD = 0.49$ ) and post-test global mindedness mean ( $M = 5.03$ ,  $SD = 0.48$ ) were also significantly correlated at  $r = .70$ ,  $p < .001$ . Prior to conducting the analysis, the assumption of normally distributed difference score was examined, and the assumption was considered satisfied. A paired sample t-test resulted in significant changes in the pretest and posttest of both cultural sensitivity  $t(72) = -2.12$ ,  $p < .05$  and for global mindedness  $t(67) = -6.51$ ,  $p < .001$ , illustrated in Table 3. The negative t values for both global mindedness and cultural sensitivity indicates that the mean scores for both scales were higher at the post-test than the pre-test. Thus, we assume that for the majority of students, the SAS experiences increased their global mindedness and cultural sensitivity as indicated by the statistical significances of these t-tests.

Table 2  
*Cultural Diversity Scale*

Attitudes towards Cultural Diversity Statements
In education, it does not matter if a student is rich or poor, everyone should have the same chance to succeed.
Each student should have an equal opportunity to learn and succeed in education.
Education should help students develop respect for themselves and others.
Students should be taught to respect those who are different from themselves.
Students should feel pride in their heritage.
All students should learn about cultural differences.
Each minority culture has something positive to contribute to U.S. society.
Education activities should be representative of a wide variety of cultures.
I enjoy being around people who are different from me.
Educators are responsible for teaching student about the way in which various cultures have influenced this country.
Educators should plan activities that meet the diverse needs and develop the unique abilities of students from different ethnic backgrounds.
The perspectives of a wide range of ethnic groups should be included in the curriculum.
Minority individuals should adopt the values and lifestyles of the dominant culture.*
I am uncomfortable around students whose ethnic heritage is different from my own.*
Minority students are hard to work with.*
Cultural diversity is a valuable resource and should be preserved.
Cultural diversity is a negative force in the development of the U.S. society.*
There is really nothing that educational systems can do for students who come from lower socioeconomic groups.*
Students should give up their cultural beliefs and practices to fit in with other students.*

\*Negatively worded items that were reverse coded when calculating the overall mean

Table 3  
*Pretest and Posttest Comparisons for Cultural Sensitivity and Global Mindedness*

	<i>N</i>	pretest <i>M</i> (SD)	pretest <i>M</i> (SD)	<i>T</i> value	<i>Effect size</i>
Cultural Sensitivity	73	5.34 (0.49)	5.43 (0.48)	-2.12*	0.25
Global mindedness	68	4.74 (0.50)	5.03 (0.49)	-6.51***	0.79

\*p < 0.05; \*\*\* p < 0.001. Effect size calculated by Cohen’s d (Small, 0.20; Medium, 0.50; Large, 0.80 as offered by Cohen, 1992).

Cohen’s *d* for cultural sensitivity was estimated at -0.25, which is a small effect based on Cohen’s (1992) guidelines. Time-2 global mindedness reports were also statistically significantly higher than the time-1 mean. Cohen’s *d* for global mindedness was estimated at -0.79, which is a large effect based on Cohen’s (1992) guidelines.

**Students Responses to Open-Ended Questions**

Students also responded to a series of open-ended questions meant to assess the breadth and depth of their experiences during the SAS voyage. For the purposes of the present analysis, we will highlight only a few participant quotes to provide context for what was most relevant to cultural sensitivity and global mindedness. More specifically, when asked, “What type of impact did the program have on you personally, academically,

socially, and professionally?”, one student indicated, “I am a better global citizen,” while other students focused on the importance of the cultural immersion experiences and aspects of the curriculum that required them to reflect and apply what they had learned. For example, one student stated that the biggest impact of the program came from “. . . homestays in Vietnam, India, and Ghana, where I was able to be integrated into the culture more than in other ports. Similarly, another student reported, “I enjoyed the application process in each of the countries, as well as focusing on the reflection aspect of what we learned.” Moreover, students appreciated that the SAS voyage offered exposure to experiences beyond that of traditional tourist attractions. One student offered, “Semester at Sea is different from traveling. I could do some impactful programs through SAS, and I think I’ve never been [*sic*] to villages in rural areas, nor to orphanages,



if it were not for SAS.” Another student listed the following as the most impactful parts of the experience: “Conversations that I had with most people from other countries/ethnicities around the world. Being a part of the SAS community. Gaining a lot of diverse knowledge and learning new things every day.”

### Discussion

The purpose of this study was to examine whether the Semester at Sea program influenced students’ global mindedness and cultural sensitivity. We measured both of these constructs prior to the program starting and at the end of the voyage to determine if there was an increase, a decrease, or the scores remained the same. The findings indicated a significant increase in global mindedness and cultural sensitivity at the completion of the SAS voyage. The results of the present study support the positive role of global learning and cultural immersion experiences that contribute to student growth. However, given the nature of the SAS it can be difficult to pinpoint what specific aspects of the program might be responsible for the shifts seen in students.

Although we did not collect data on the specific impact of the course curriculum, the results seem to suggest that the Global Studies course that had the “cultural awareness” component during every class period for 15 to 20 minutes might have had an influence in the students’ cultural sensitivity. When the “cultural awareness” module was presented in class, various prejudicial and/or discriminating ethnic, gender, and cross-cultural scenarios were presented to the students by the course instructor. The students got into smaller groups, discussed the scenario, and generated options on how the students would approach the problem. In addition, the lecture classes focused on the specific culture of the country where the ship docked. For many of the field labs and class assignments, the instructors required the students to talk to local people about their own life challenges and strengths. These activities may have also contributed to increasing cultural sensitivity. Also, student responses to the open-ended questions in the present study further suggest that students were impacted most by the cultural immersion experiences they had at the ports and the field classes. Overall, the increases in cultural sensitivity found in the present sample mirror results from studies that measured cultural sensitivity at the conclusion of other short-term study abroad programs (Clark III et al., 2009; Kim & Goldstein, 2005; Williams, 2005; McCabe, 1994; Niehaus, & Wegener, 2019; Senzaki et al., 2018).

In terms of global mindedness, the Global Studies course, the field classes that were part of the courses being offered, and the SAS excursions made a significant impact on the students’ ideas of the world

occurrences and, consequently, made them more global minded. For example, visiting the Third World countries—e.g., Myanmar, Vietnam, India, Ghana, and South Africa—may have increased their compassion, sensitivity, general knowledge, and global awareness at the same time. In Ghana, for instance, some students elected to do home stays with local families. In their home stay, the students realized that many families lived in small huts with no running water, and no electricity, and outhouses were still being utilized as makeshift toilets. As indicated in the participant responses to open ended questions, students reported that the homestays were an integral part of their learning experience.

Again, in Ghana, as part of an SAS excursion, the students visited fortresses where African slaves were captured and held until they were transported to America in the 1600s, 1700s, and 1800s. About half the students on the ship got to see the gigantic fortresses along the Ghana coast where the French and Dutch companies had monopolized the transport of slaves from Africa to the U.S. The slaves were captured, branded, and then held in these fortresses for as long as a month before being sent like cattle to the east coast of the United States. This was an impactful, demoralizing, emotionally disturbing, yet memorable moment for the students and faculty alike.

The visit to Cape Town in South Africa was another location that served as “an eye opener” for the SAS students. This visit made them more aware of prejudice and discrimination because of the color of a person’s skin. SAS conducted many excursions to Robben Island where Nelson Mandela was imprisoned for 27 years. By visiting this historic site, the students learned, saw pictures, and movies on the ways in which black, colored, and white people were treated. Many of the students later commented that they were aware of apartheid, but they did not know the intensity of the segregation.

Likewise, the first author of the manuscript took students on a class excursion to a township (slum area) in Cape Town. We walked through the entire township with our local guide, talked to residents living there, and visited the marketplace and the schools where the children studied and played. It was difficult to see the plight of some of these hutments and the close proximity of the hutments to each other, and the number of people living in the hutments. Students were moved by the perceived lack of privacy or personal space that these families had. On the tour, the group saw the hostel that fruit pickers, vegetable pickers, road construction workers, and menial job workers lived in when they came to Cape Town from adjacent cities and oftentimes countries close by. The experiences the students had during this visit to this township was very informative and increased their awareness of diverse ways of living daily life.

In India the students could select from a number of excursions that SAS had arranged. The most popular trip was the five-day excursion to Jaipur, Udaipur, Delhi, and Agra. In Agra the students saw the Taj Mahal, one of the Seven Wonders of the World. Another popular excursion was to see parts of rural India, spend 3 days in a village, and work on a service-learning project. This project entailed building a small room and stacking books on the shelves in it so that the children could use it as a library. For these students, seeing life in rural India was a novel experience because they saw the limited resources that most families had. Consistent with previous research (Munoz, et al., 2006; Zhai & Scheer, 2002), these kinds of hands-on, culturally immersive experiences have the greatest impacts on students. In particular, being part of this environment provided students with an increased awareness of the impact that poverty has on the lives of people in other countries.

Another SAS excursion involved sending students to an Indian dinner, followed by a showcase of different Indian dances from various states in India. The first author of this manuscript did a field class in Kerala where they visited an Indian University. The Dean of the college gave a presentation entitled, "Changes That Have Occurred in the Indian Family over Time". This presentation was well-received by the American students. The group was taken to a soup kitchen where the elderly Indians who lived alone came once a week to have a group lunch, socialize, sing, and play games. The students spoke to the older adults via the services of a translator. The final activity for the day involved going back to the university where the students had the opportunity to engage in conversation with Indian students and ask them questions about everyday life. This was followed by five different faculty members sharing highlights of their research projects with the group.

Previous researchers investigated whether students' sense of global mindedness had altered after the short-term study abroad program. Researchers (Douglas & Jones-Ridders, 2016; Redwine et al., 2018) also concluded in their research studies that the students' global mindedness increased after study abroad program. The results of this research study are consistent and in agreement with previous studies. Previous research (Zorn, 1996) has also indicated that longer study abroad programs have greater impacts on global mindedness, and as a result the findings from the present study could be linked to the duration of the SAS program. As pointed out previously, study abroad programs can range from a few weeks to a year, and the results here provide additional support for study abroad programs that give students more time to fully experience diverse cultures.

### Recommendations and Implications

1. Since SAS is a semester long multiple-country program, more studies are needed to specifically address the benefits of this program. The extant literature is limited and does not address many of the advantages that students who participate in the program encounter. Similarly, more research on SAS programs will give important insight into the ways that the program might be improved to better support positive student outcomes.
2. Qualitative investigations need to be conducted to get at the depth of the students' responses so that we know more about how the program influenced changes in the students and visiting which countries made the greatest impact. These kinds of study abroad programs can better tap into the specific aspects of SAS curricula and structures that are most beneficial. Moreover, studies should also examine the perceived challenges of SAS that may have interfered with student growth and development.
3. More financial supports in the forms of grants and scholarships need to be awarded to low-income and minority students on the basis of financial need and merit so that they too can take advantage of the same perks that are awarded to other students who come from more privileged backgrounds. Although SAS is already giving out scholarships to underprivileged students, universities, and foundations, the government needs to sponsor more students for study abroad programs as well.
4. Additional research is needed to determine which countries, cultural experiences, field classes, and SAS excursions had the greatest impact on students' global awareness and cultural sensitivity. This will provide valuable information for SAS faculty and staff in the development of high impact activities and course curriculum.
5. Since participating study abroad programs have been proven to be effective and significant in the lives of undergraduate students, more administrators and educators need to make it an integral part of the students' undergraduate program.
6. Most of the students that seem to be participating in the short-term study abroad program are students majoring in business, linguistics, nursing, social work, and social sciences. Students from the natural sciences, i.e., mathematics, physics, chemistry, microbiology should be encouraged to take advantage of this experience as well.

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