THE LONG-TERM EFFECTS OF A SHORT-TERM STUDY ABROAD EXPERIENCE ON BACCALAUREATE-PREPARED NURSING STUDENTS

A Thesis presented to the Faculty of the Master of Public Health and Graduate School at the University of Missouri

In Partial Fulfillment of the Requirements for the Degree Master of Public Health

by

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The undersigned, appointed by the Dean of the Graduate School, have examined the thesis entitled

THE LONG-TERM EFFECTS OF A SHORT-TERM STUDY ABROAD EXPERIENCE ON BACCALAUREATE-PREPARED NURSING STUDENTS

Presented by Laura Streeter, a candidate for the degree of Master of Public Health,

And hereby certify that, in their opinion, it is worthy of acceptance.

Professor Lynelle Phillips, thesis committee chair
Professor Tina Bloom
Professor Mansoo Yu
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I would specifically like to thank Ms. Lynelle Phillips, Dr. Maithe Enriquez, Dr. Tina Bloom, and Dr. Jane Armer for their willingness to act as mentors in both my undergraduate and graduate studies at the University of Missouri. I look to these strong women as role models in both my professional career and in my personal life. I would not be where I am in my career today without them.
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Abstract

Cultural competency is a crucial component of baccalaureate nursing education to support patient-centered practice (Calvillo, Clark, Ballantyne, Pacquiao, Purnell, & Villarruel 2009). Studying abroad is associated with short-term gains in students’ cultural competency; however, little research has addressed whether cultural competence is affected long-term, particularly when the study abroad experience is relatively short (Phillips, Bloom, Gainey, & Chiocca, in press). Therefore, the question that drove this study was: what are the long-term effects of a short-term study abroad experience on baccalaureate nursing students?

The participants in this study were practicing nurses (N=21) who had traveled to Ghana for two-week study abroad experiences as senior nursing students between 2011 and 2015. Qualitative data (collected immediately post-travel) with these participants revealed four key themes of transformation consistent with cultural transformation: adaptability, cultural competency, understanding of social determinants of health, and mutual partnerships with patients. Social media was used to enroll participants in a study conducted over a one-month period in Fall 2016. Of the 45 contacted, 28 responded and consented to participate and 21 completed data collection. A series of Likert-style questions (5=Strongly Agree, 1=Strongly Disagree) were used to measure these nurses’ perceived immediate post-travel change, versus their perceptions of the sustained changes over time. Results supported that the four key themes of cultural transformation persisted over time. Creating mutual partnerships and understanding social determinants of health had the highest mean score and lowest standard deviation (mean= 4.76, standard deviation= 0.44)
Background

Cultural competency is a crucial component of baccalaureate nursing education to support patient-centered practice and improve patient outcomes (Sargent, Sedlak, & Marsolf, 2005; Cavillo et al., 2009). Studying abroad is associated with short-term gains in students’ cultural competency; however, little research has addressed whether cultural competence is affected long-term, particularly when the study abroad experience is very short (Phillips et al., in press). Therefore, the question that drove this study was: what are the long-term effects of a short-term study abroad experience on baccalaureate nursing students?

The opportunity for this study to provide evidence that short-term study abroad experiences are worthwhile for baccalaureate nursing programs is significant. Although these trips can be costly and higher education is experiencing budget cuts nationwide, evidence supporting the long-term gains of these experiences will be useful when accommodating diverse patient populations in the future.

Nurses are at the forefront of providing care for healthcare consumers both in the hospital and community settings. Every healthcare consumer has a right to be treated with culturally competent care by each healthcare provider. Nursing faculty and administration have an obligation to recognize their role in providing nursing education related to cultural competency. Currently, the Sinclair School of Nursing at the University of Missouri follows the recommendations set forth by the Commission on Collegiate Nursing Education (CCNE) and the American Association of Colleges of Nurses (AACN) published in The Essentials of Baccalaureate Education for Professional Nursing Practice. This document states that nurses prepared at the baccalaureate level
should be prepared to practice in a multicultural setting and provide an understanding of a variety of cultures to deliver high-quality and effective care (American Association of Colleges of Nursing [AACN], 2008, pp. 6). As the world continues to diversify, it is important that nursing education change with it.

In today’s world, the use of the Internet is intertwined with everyday life. The Internet can be accessed through personal computers, mobile devices, and televisions. One popular trend of the Internet today is the use of social media sites. Topolovec-Vranic and Natarajan (2016) described social media as any site where users could create personal profiles that could be used to interact with other individuals. For this study, the term social media refers to Facebook, a social media site that is used worldwide.

Laura Streeter (referred to as primary researcher) performed this study under the direct supervision of Lynelle Phillips and Dr. Tina Bloom. The original qualitative data was collected immediately post travel from faculty at the Sinclair School of Nursing at the University of Missouri between 2011 and 2015. These responses (examples in Table 1) were coded and different researchers identified themes independently. From these four key themes, questions were created to identify which skills of cultural transformation persisted over time. These questions are listed in Table 2 and drove the current study.
Literature Review

A review of relevant literature was performed prior to beginning this study and throughout the months following data collection. First, the primary researcher reviewed articles that studied the effects of studying abroad on nursing students. Some of the key terms used during these reviews of literature included: study abroad, recruitment (recruit*), social media, social media as a recruitment tool, study abroad research, long term impact of study abroad, and longitudinal. Search engines included PubMed, MEDLINE, and CINAHL. The researcher found no articles that examined the direct link between a short-term study abroad experience and long-term outcomes using these search engines.

It has been well documented in the literature that didactic study (including lectures and case studies) of other cultures does not equate to the culture competency gained from being immersed into another culture (St. Clair & McKenry, 1999; DeDee & Stewart, 2003). The immersion method of learning cultural competency has shown to have a positive impact in increasing overall cultural awareness in those who have traveled abroad, even if for a short period, when compared to their peers who have not studied abroad (Edmonds, 2012).

Research has shown that study abroad trips were beneficial for students to learn skills associated with personal and professional growth such as empathy, expanding worldviews, and adaptability (Walsh & DeJoseph, 2003; Edmonds, 2012; DeDee & Stewart 2003). While many studies continue to show the immediate benefits of studying abroad for nursing students, there is still a lack of evidence regarding the long-term effects of these programs (Ruddock & Turner, 2007).
The use of social media as a recruitment tool for longitudinal studies is a new and innovative method in research. A review of the literature was performed in hopes of finding a protocol for the use of this method of recruiting research participants. One study conducted by Bender, Cyr, Arbuckle, and Ferris (2007) used advertisements for patients if they were interested in this study. This method of recruitment led to the potential for privacy breaches and the release of identifying information about each participant, but did not provide a protocol for ensuring privacy.

Other articles discovered similar barriers to using social media as the current study presented. A study performed of parents by Dyson, Shave, Fernades, Scott, & Hartling (2017) reported that the use of social media to collect data was difficult to initiate and that the use of discussion threads were inconsistent. In another study designed to reach pregnant indigenous woman, researchers found that they lost many participants to follow-up and only a few stayed intensively engaged (Kira, Glover, Walker, & Bauld 2016).

While there are many potential barriers and limitations to using Facebook or other social media outlets to recruit and conduct research, it has been shown to be a cost-effective and time-efficient resource. Prescott, Phillips, DuBois, Bull, Mustanski, and Ybarra (2016) found that they were able to recruit a cohort of gay and bisexual men that had been difficult to reach in a short time by utilizing targeted advertisements on Facebook. Dyson et al. (2017) also found this method to be beneficial to recruit parents of adolescents based on the connections between participants.

In a literature review conducted by Topolovec-Vranic and Natarajan (2016), 12 out of 30 studies were found to have successfully used social media as a recruitment
method. This review showed that using social media as a method for recruitment is beneficial for hard-to-reach and pre-defined populations (as is the case for this thesis project) (Topolovec-Vranic & Natarajan, 2016). The authors did not comment on the demographics of the population or the cost-effectiveness of this method.

The review of literature performed by the primary researcher in this study showed that there was a need for further research in the long-term effects of short-term study abroad experiences and future evaluations of the use of social media to recruit participants for research studies.
**Methods**

Between 2011 and 2015, 51 nursing students traveled abroad to fulfill their undergraduate community health clinical requirement. These students traveled to Cape Coast, Ghana, to work with various non-governmental organizations to provide health screenings, education, and other nursing services to underserved villages. Upon return, students were asked to answer questions about their experience abroad (N=51) (See Table 1). Questions included comparisons of what makes people happy and healthy (in both Ghana and the United States) and questions about their expectations both before and after their travel experience.

From their qualitative answers, four key themes of cultural transformation were identified: (a) cultural competency, (b) adaptability, (c) understanding of social determinants of health, and (d) creating mutual partnerships with patients (See Table 1). The themes identified were consistent with previous findings of the short-term impact of study abroad programs (Edmonds, 2012).

Social media was used to enroll participants in a study conducted over a one-month period in Fall 2016. A series of Likert-style questions (5=Strongly Agree, 1=Strongly Disagree) were used to measure these nurses’ perceived immediate post-travel change, versus their perceptions of the sustained changes over time. The participants in this study were practicing nurses (N=21), who had traveled to Ghana for two-week study abroad experiences as senior nursing students between 2011 and 2015 and had participated in follow-up questions following their study abroad experience.

Using Facebook to recruit this cohort, the researchers were able to reach 45 of these students and invite them to a private group to answer questions about their career
today (See Figure 1 for example photo from group). Initially, the researchers had planned to ask open-ended questions and complete a qualitative study, but quickly learned that this group was more open to quantitative and Likert-style questions sent via messenger (See Table 2). The primary researcher created a closed, private group, controlled by only one researcher, to obtain informed consent and ensure privacy of participants. For participation this study, each participant was offered a bracelet made in a Ghanaian orphanage. To encourage further participation, respondents were entered into a raffle for a $50 VISA gift card or a painting from Ghana.

Quantitative data collected through Survey Monkey were imported and analyzed using SPSS. The data were kept anonymous with only a travel year connected to the answers of each respondent. De-identified data were protected by primary researcher through the data collection, data entry, and data analysis phases. Mean scores and standard deviations were calculated using SPSS software.

<table>
<thead>
<tr>
<th>Adaptability</th>
<th>“This experience will allow me to know I can do the job I am doing with less than I may have around. Almost every day in the community we either needed something we didn’t have and had to be resourceful or the clinic nurses informed us that they never used or had what it was we were asking about. So I am much more aware of how easily accessible things are here.”</th>
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<tbody>
<tr>
<td></td>
<td>“I will also appreciate the access to healthcare and healthcare supplies. I know how frustrating it is to run out of supplies on the floor, but I now know a lot of people never even have access to those things.”</td>
</tr>
<tr>
<td></td>
<td>“This experience had a huge effect on my practice as a nurse. It made me more resourceful and better at communicating.”</td>
</tr>
</tbody>
</table>
When we were testing the communities for malaria, we had been throwing the used needles into a trash bag. We decided to use our resources and found a plastic bottle on the ground to put all the needles in.”

**Social Determinants of Health**

- “I have a new understanding of the barriers that contribute to health and will consider those when providing care to my diverse patient population. Everyone has such unique backgrounds and it must be considered when engaging a patient to provide care that will make any lasting impact.”

- “People who are healthy in Ghana are ones who keep their houses clean, have access to clean water, and understand how to supplement their diet with the recommendations put out by the government. In the US, healthiness is similar. It includes healthy diet and exercise, clean and proper shelter, and access to clean water. The difference is that in Ghana, these resources are not available to the majority.”

- “Although genetics play a major role in health, social, and economic status, environment, social support, access to healthcare and lifestyle choices are also important. These factors affect health not just in Ghana and the US, but around the world.”

**Cultural Competence**

- “The experience gave me an overall cultural awareness. I feel that I have a better understanding of cultural differences & how to communicate effectively. I have also become more comfortable with diversity. I have learned to be more flexible in my patient care & when working with others.”

- “I will never forget this experience, ever. It was fantastic & now, I definitely feel confident in my ability to reach all ages & walks of life no matter the race, age, community, language barrier… it's amazing.”

- “As a nurse, I gained cultural competency in an in depth way that can only come from being immersed in a culture completely different from one's own. I understand what it is like to be a stranger in a different culture and that makes me better able to assist and support someone who is in a similar situation.”

**Mutual Partnerships**

- “It’s helped me to also see the importance of making more personal connections with the patients.”

- “Everyone has such unique backgrounds and it must be considered when engaging a patient to provide care that will make any lasting impact.”
• “A lot of the things/interventions we learn about and use here don't work there with their lifestyles. I learned that you have to work with the patient and learn about their life to find something that works in their life.”

<table>
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<tr>
<th>Table 2. List of Likert-style Survey Questions</th>
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<tbody>
<tr>
<td><strong>Adaptability</strong></td>
</tr>
<tr>
<td>• Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana helped my ability to adapt to unpredicted or new situations.</td>
</tr>
<tr>
<td>• Thinking about where you are now in your career, rate how much you agree with this statement: I am adaptable.</td>
</tr>
<tr>
<td><strong>Cultural Competency</strong></td>
</tr>
<tr>
<td>• Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana enhanced my ability to relate to people from other cultures than my own.</td>
</tr>
<tr>
<td>• Thinking about where you are now in your career, rate how much you agree with this statement: I feel confident in my ability to relate to people from different cultures than my own.</td>
</tr>
<tr>
<td><strong>Social Determinants of Health</strong></td>
</tr>
<tr>
<td>• Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana helped me learn how a person’s environment and living circumstances (social determinants) can impact one’s overall health.</td>
</tr>
<tr>
<td>• Thinking about where you are now in your career, rate how much you agree with this statement: I understand how home, family, community, social context, income level, environment (social determinants) impact one’s overall health.</td>
</tr>
<tr>
<td>• Thinking about where you are now in your career, rate how much you agree with this statement: I understand the role public health plays in addressing injustices and socially determined health conditions.</td>
</tr>
<tr>
<td><strong>Mutual Partnerships</strong></td>
</tr>
<tr>
<td>• Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana helped me in creating mutual caring relationships with the patients we served.</td>
</tr>
</tbody>
</table>
• Thinking about where you are now in your career, rate how much you agree with this statement:
  It is important to create a mutual caring relationship with my patients.

Figure 1. Cover Photo for Facebook Group Where Data Were Collected
Results

Of the 45 participants who were invited to participate, 28 consented to be a part of the group and 21 provided answers to our quantitative questions (a response rate of 62%, retention rate of 75%). By and large, we found that the majority of our population still agreed that the four key themes of cultural transformation (adaptability, cultural competency, social determinants of health, and creating mutual partnerships) were evident in their careers today. Results supported that the four key themes persisted over time, ranging from 2 to 6 years following their study abroad experience. Creating mutual partnerships and understanding social determinants of health had the highest mean scores and lowest standard deviations (mean= 4.76, standard deviation= 0.44) of questions related to current professional roles. All four themes had a favorable response (See Table 3). The mean scores ranged from 4.42 to 4.85 and the standard deviation ranged from 0.35 to 0.67. Previous studies on short-term study abroad experiences have also shown a positive effect on the individuals’ professional roles (Smith & Kurry, 2011).

The question with the most favorable response was, “Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana helped me learn how a person’s environment and living circumstances (social determinants) can impact one’s overall health.” The researchers were surprised that 85.7% (N=18) of participants selected that they strongly agreed with that statement and 14.3% (N=3) of participants chose that they agree with that statement. No participants selected neutral, disagree, or strongly disagree. This individual question produced a mean score of 4.86 and a standard deviation of 0.35, indicating that studying abroad had a very positive effect on learning about social determinants of health.
The prompt with the least favorable response was “Reflecting back on your time in Ghana, rate how much you agree with this statement: My time in Ghana helped me in creating mutual caring relationships with the patients we served.” For this question, 11 participants chose strongly agree (52.4%) and eight chose agree (38.1%). Interestingly, two respondents selected “neutral” to this question. The mean for mutually caring relationships immediately post travel to Ghana was 4.42 and the standard deviation was 0.68.

From those that responded, there were 20 female participants and one male participant. Five participants reported in the Facebook group that they were either in graduate school, or had obtained a graduate degree. The participants had all traveled to Ghana between 2011 and 2015, with 10 of those respondents (47.6%) traveling in 2011. Demographic data on race or socioeconomic status was not collected in this study.

<table>
<thead>
<tr>
<th>Table 3: Results of Likert-style Questions Regarding Current Professional Roles</th>
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<tbody>
<tr>
<td><strong>Adaptability:</strong></td>
</tr>
<tr>
<td><strong>Adaptability</strong></td>
</tr>
<tr>
<td><img src="chart.png" alt="Adaptability Chart" /></td>
</tr>
</tbody>
</table>

Thinking about where you are now in your career, rate how much you agree with this statement: I am adaptable.

Mean = 4.6, SD = 0.50

Strongly Agree: N= 12/20*
Agree: N= 8/20*

*One participant did not provide a response to this question
### Cultural Competency

Thinking about where you are now in your career, rate how much you agree with this statement:
I feel confident in my ability to relate to people from different cultures than my own.

Mean= 4.5, SD= 0.60

<table>
<thead>
<tr>
<th>Agreement Level</th>
<th>Count (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>12/21</td>
</tr>
<tr>
<td>Agree</td>
<td>8/21</td>
</tr>
<tr>
<td>Neutral</td>
<td>1/21</td>
</tr>
</tbody>
</table>

### Understanding Social Determinants of Health

Thinking about where you are now in your career, rate how much you agree with this statement:
I understand how home, family, community, social context, income level, environment (social determinants) impact one’s overall health.

Mean= 4.76, SD= 0.43

<table>
<thead>
<tr>
<th>Agreement Level</th>
<th>Count (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>16/21</td>
</tr>
<tr>
<td>Agree</td>
<td>5/21</td>
</tr>
<tr>
<td>Neutral</td>
<td>1/21</td>
</tr>
</tbody>
</table>
Creating Mutually Caring Relationships:

Thinking about where you are now in your career, rate how much you agree with this statement:
It is important to create a mutual caring relationship with my patient.

Mean = 4.76, SD = 0.43

Strongly Agree: N=16/21
Agree: N=5/21
Limitations

Initially, the most significant barrier in this study was low participation. This drove us to change our study design from qualitative (using online discussion via social media) to quantitative (using surveys) in order to reduce participant burden, which greatly increased responses. The University of Missouri Institutional Review Board approved this change in research design.

While using social media as a recruitment tool proved to be beneficial for locating participants, poll-style surveys via social media were cumbersome. Facebook group settings caused the poll-style questions to become mixed-up as participants answered questions, shifting each poll up and down (See Figure 2). Providing a survey tool through Survey Monkey sent via private message and group posts proved to be more effective.

The data collected during this study were self-reported by participants. Initially, questions asked in poll-style in the Facebook group may have led some participants to answer questions more favorably (See Figure 2). However, with the use of anonymous surveys, this would not have been the case. The use of self-reported data certainly can lead to bias when addressing personal values.

Furthermore, due to the switch to Likert-style questions, we were unable to ask follow-up questions and could not ascertain credibility by asking for specific examples or elaboration on why students answered in the manner they did. Future studies would benefit from asking for specific examples that showcase how these themes may be applicable in their everyday lives.
Initially, the research team had hoped to include more questions to initiate discussions as seen above; however, due to low participation a survey was later sent out.

As each participant responded, answers would become mixed-up in the poll. This made it difficult for participants to answer questions in order and often they would select the incorrect answer.
**Discussion**

While the participants in this study rated their perception of immediate post-travel state and current state positively, there was not a control group to compare these values of cultural transformation. The researchers were unable to test at this time if this cohort was objectively better in the four key themes of adaptability, cultural competency, social determinants of health, and mutually caring relationships than those who did not study abroad. A similar research design could be implemented with a cohort of peers who were unable to participate in the short-term study abroad experience.

The use of social media as a recruitment tool is a new and evolving method of recruitment in nursing research. The researchers found it to be beneficial in reaching out to our cohort, as there was a specific list of people that needed to be reached. The researchers were unable to find a defined protocol for use of social media through a literature review. This study did not put any participant’s privacy at risk and no identifying data was comprised by participation in this group. Our success in recruitment using social media were met with the downside of the discussion and poll-style questions being used inconsistently and difficult to initiate, similar to what had been found in similar studies (Dyson et al., 2017). Recruitment through Facebook proved to be cost and time efficient for the researchers and could be of benefit in future studies designed to reach out to specific cohorts.

Notwithstanding, these data show that even short-term study abroad programs are beneficial for baccalaureate nursing students. Early evidence shows that the effects from short-term study abroad experiences are sustained and have a positive effect on future nursing practice. This link should further be explored in future studies.
References


