Changes in Ankle Joint Proprioception Resulting From Strips of Athletic Tape Applied Over the Skin

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Short of Transformation: American ADN Students’ Thoughts, Feelings, and Experiences of Studying Abroad in a Low-Income Country

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Short of Transformation: American ADN Students’ Thoughts, Feelings, and Experiences of Studying Abroad in a Low-Income Country*

Cynthia L. Foronda and Ruth Ann Belknap

Abstract

ADN students are a large yet distinct subgroup of nursing students who require research and understanding. The purpose of this study was to describe the thoughts, feelings, and experiences of American associate degree nursing (ADN) students who participated in a short study abroad course in a low-income country. A qualitative, narrative method was used. Three categories emerged from the analysis. Participants revealed thoughts of “constant comparisons”, feelings of an “emotional journey”, and they experienced “learning”. Participants did not demonstrate perspective transformation as defined by Mezirow as participants signified no intent for social action. Several potential blocks to perspective transformation were identified: egocentrism/emotional disconnect, perceived powerlessness/being overwhelmed, and a vacation mindset. The findings provide insight into the student experience of studying abroad. Transformative learning is not a guaranteed result. Nurse educators must consider strategies to foster transformation including discussing global systemic oppressors, international relations, coping, connecting, and social action.

KEYWORDS: study abroad, international, nursing, education, students, transformation, ADN, associate degree

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Over 1,000 associate degree nursing (ADN) programs exist in the United States. Graduates of ADN programs represent 58% of the entry level graduates in nursing each year (National League for Nursing, 2010). ADN students are a large yet distinct subgroup of nursing students who require research and understanding. ADN students differ from bachelor of science in nursing (BSN) students in many ways. As an aggregate, ADN students are older, have a lower college retention rate, and less preparation than a BSN student (National League for Nursing, 2007, 2010). The ADN curriculum is focused on safe practice and technical skills. Knowledge acquisition in specialty areas such as obstetrics, pediatrics, mental health, and community health is much abbreviated.

Short term study abroad programs are increasing in popularity, due to student interest in experiences in another country and the lower cost and time commitment of a short term program as compared to a traditional semester abroad. The direction of international education is to promote exchanges in low-income countries (NAFSA, 2010; Senator Paul Simon Study Abroad Foundation Act of 2007, 2007). Before internationalized curricula are accepted, educators and administrators will look to the literature for evidence to support the initiative. The research regarding study abroad in nursing has been growing, but mainly has focused on BSN students and experiences in developed countries. According to a 2008 survey, the top identified challenges to expanding education abroad at community colleges were 1) student cost and fees (83%), 2) budget cuts (53%), and 3) limited staff/resources (53%) (Institute of International Education, 2008). No study was located addressing the ADN student who studied abroad. Before short term study abroad can be endorsed for ADN students, the benefits of this type of program must be evaluated in terms of its contribution to ADN education. This study is a first step in filling this knowledge gap.

**BACKGROUND**

Studying abroad has been linked to increasing cultural awareness, sensitivity, and competence of nursing students in BSN programs (Callister & Cox, 2006; Drake, 2004; Evason & Zust, 2006; Genz, 2007; Haloburdo & Thompson, 1998; Inglis, Rolls, & Kristy, 2000; Koskinen & Tossavainen, 2003; Koskinen & Tossavainen, 2004; Lee, Pang, Wong, & Chan 2007; Rolls, Inglis, & Kristy, 1997; St. Clair & McKenry, 1999; Tateyama, 2002; White, 2008). Various studies suggested study abroad promoted cognitive development and personal growth (Callister & Cox, 2006; Frisch, 1990; Green, Johansson, Rosser, Tengnah, & Segrot, 2008); Haloburdo & Thompson, 1998; Thompson, Boone, & Deeny, 2000; Walsh & DeJoseph, 2003; Zorn, Ponick, & Peck, 1995; Zorn, 1996). To explain the profound learning outcome of studying abroad, six studies described a
personal transformation (Evanson & Zust, 2006; Genz, 2007; Levine, 2009; Reimer Kirkham, Van Hofwegen, & Pankratz, 2009; Ruddock & Turner, 2007; St. Clair & McKenry, 1999).

Genz (2007) studied how students develop cultural competence through a short term immersion. She compared nursing students who participated in a three week experience in Belize to students who did not participate. “All of the students said that they had been transformed...that they would do things differently because of the short-term immersion experience, and that they would apply new learning to future practice” (p. 163). One participant described, “I will try harder to make better use of the supplies and resources that we have and not be so wasteful” (p. 165). Reimer Kirkham, et al. (2009) explored the nature of learning achieved by students regarding social justice in international health experiences. After viewing poverty, a participant verbalized, “I can either give up hope or join in the anger of injustice” (p. 7). Another poignant quotation provided by a participant, “I think about how it changed me when I came home...I felt uncomfortable buying things” (p. 8). Levine (2009) discussed the “life-changing” experiences of students who studied abroad. She completed a narrative study to describe the social and personal issues that occurred when students were immersed in other cultures. Participants indicated they learned advocacy skills that they later incorporated in their nursing practice. Participants reflected on their own discriminatory beliefs, recognized their biases, and made life changes. Evanson and Zust (2006) performed a qualitative study to describe the effects of an international nursing student experience on participants’ personal and professional lives. Every student indicated a desire to continue with international service work in the future. The literature suggested study abroad in low-income countries may produce life-changing effects as far as transforming oneself.

Although most studies complemented and validated the positive outcomes of studying abroad, some studies indicated contrary findings. Koskinen and Tossavainen (2003) discovered developing cultural competence was not always the result. They studied British nursing students who studied in Finland for three to four months. Some of the students expressed experiencing cultural shock that they were not able to overcome during their stay. The stress of language, culture, education, and housing inhibited students’ ability to participate and learn. “Students who lacked an ability to face the differences remained outsiders throughout their stay” (Koskinen & Tossavainen, 2003, p. 373). A second area of contention is the length of immersion required to achieve significant, long-lasting results. Using the International Education Survey (IES), Zorn (1996) discovered the longer one studied abroad, the higher the long term impact of the experience (p < 0.05). Students who participated in 12-16 week programs reported higher
long-term impact than those participating in three-four week programs. St. Clair and McKenry (1999) and Haloburdo and Thompson (1998) found two weeks was long enough to achieve desirable outcomes. Evanson and Zust (2004) suggested one week was sufficient to achieve professional and personal growth.

**Theoretical Framework**

As the research question combined the two disciplines of nursing and education, two theoretical frameworks influenced the study. First, Madeline Leininger’s (1978, 1991, 1995, 1996) theory of transcultural nursing inspired the research interest. Leininger’s theory attended to the unique cultural considerations and actions of nursing thought and practice. Mezirow’s (1981, 1991, 1994, 1997, 2009) theory of transformative learning was used to guide this education-based study.

**Theory of Transformative Learning**

Jack Mezirow (1981, 1991, 1994, 1997, 2009) developed the theory of transformative learning, a constructivist-based theory of adult learning. Mezirow (1994) presented four total processes or ways of learning: 1) refining or elaborating our meaning schemes, 2) learning new meaning schemes, 3) transforming meaning schemes, and 4) transforming meaning perspectives” (p. 224). First, elaboration of meaning schemes refers to one’s elaborating on an existing point of view (Mezirow, 1997). The second process, learning new meaning schemes, is different as it entails establishing a new point of view (Mezirow, 1997). The third process, transforming meaning schemes, involves transforming one’s point of view. The fourth process, perspective transformation, entails a change in “habit of mind” or one’s entire way of thinking (Mezirow, 1997). Perspective transformation is the most significant kind of learning. Perspective transformation is an “emancipatory process of becoming critically aware of how and why the structure of psycho-structural assumptions has come to constrain the way we see our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings” (Mezirow, 1981, p. 6). The final outcome in the theory is reflective action. “Action in transformation theory means making a decision, not necessarily an immediate behavior change”…and results in “learners motivated to take collective social action to change social practices, institutions, or systems” (Mezirow, 1994, p. 226).
Research Question

The following research question guided the study: “What are the thoughts, feelings, and experiences of ADN students who participated in a short study abroad program in a low-income country?”

DESIGN AND METHOD

A qualitative, narrative method was used. Institutional Review Board (IRB) approval was granted. Data was obtained by the lead author. Students who were enrolled in the transcultural nursing course were invited via email to voluntarily participate. Phone interviews occurred two to six weeks from the date participants returned home. Oral consent was obtained and interviews were digitally recorded and later transcribed. Participants were asked to, “Tell me about your thoughts, feelings, and experiences of studying abroad in Ecuador.” Prompts were used to facilitate elaboration and clarification.

Course Description

Participants were recruited from a transcultural nursing course that included online didactic and a clinical components. Before departure, students had participated in online discussions, and formulated personal objectives. In Ecuador, students had observational and patient care experiences. They also interacted with Ecuadorian folk healers, nurses, and nursing students. The second week of the clinical experience, students went to a remote village in the Amazon rain forest to stay in a Quichuan community. Students were housed in groups in wooden cabanas having beds. Facilities included a public bathroom with electricity and cold showers. In the community students participated in various activities including a traditional yucca planting ceremony, a medicinal plant hike, and a shaman ceremony. Several tourist-like yet culturally informative activities were also incorporated including visiting “Mitad del Mundo” (Middle of the World) and a natural volcanic hot springs.

Data Analysis

The transcripts were read several times noting the overall tone. Data were analyzed using categorical-content perspective developed by Lieblich, Tuval-Mashiach, & Zilber (1998). The steps are summarized as follows: 1.) Selection of the subtext, 2.) definition of the content categories, 3.) sorting the material into the categories, and 4.) drawing conclusions from the results (p. 112-114).
The quotes and categories were further evaluated by three nurse researchers with qualitative research expertise. The data were discussed and sorted into categories until consensus was reached.

Both authors were Anglas. The lead researcher at the time of the study was a nursing instructor who had participated previously as an instructor of the transcultural nursing course in Ecuador. However, she did not participate the year the data were collected. Her experience supported an assumption that the students would experience a personal transformation. The second author had experience leading short term study abroad experiences in Latin America with BSN students, but had never participated in this particular course.

FINDINGS

Thirty four students were invited to participate. A clustering approach was used to gather a total of ten female participants. Participants’ ages ranged from 20 to 49. One participant identified herself as a person of color and nine participants identified themselves as Caucasian American. All were born in the United States and seven of the ten participants had traveled previously outside of the country for vacation. Only one participant had previously participated in a study abroad program. The participants were from three different schools located in the Midwestern and Southeastern United States. Telephone-recorded interviews ranged from 27 minutes to 56 minutes. Pseudonyms were issued to preserve anonymity.

The following three categories emerged from the analysis of the data regarding the thoughts, feelings, and experience of study abroad: Constant Comparisons, Emotional Journey, and Learning. The category of Constant Comparisons encompassed the following subcategories: cultural beliefs, health care practices, and poverty. The category of Emotional Journey included the four subcategories of fear, frustration, shock/surprise, and sympathy. Using Mezirow’s theory of transformative learning (1991) as a lens, the final category of Learning emerged and was refined to include two subcategories: elaborating and/or learning new meaning schemes and transforming meaning schemes. No students achieved perspective transformation and potential blocks were posited. The Learning Journey Model illustrates the findings.
Figure 1. Learning Journey Model.
Constant Comparisons

One of the most striking characteristics of the narratives was the constant comparisons all participants made. Angie provided a narrative about differences with the Quichua belief system.

They don’t believe in illnesses. They believe in shamanism…they don’t believe that people get sick. They believe that somebody wished them bad… If something good happens, something bad happens to somebody else…that was a big shock…there is no way I could comprehend that one.

When touring hospitals, all of the participants made comparisons regarding the differences in health care practices. Participants were surprised to see many patients in one large room. Dawn stated,

They had fifty women in one room…the women were either all pregnant…or just given birth or who had miscarried…they just have them all in the same room. This is something here in the States we never would do. We would never put a woman who just lost her baby right next to someone who is celebrating the birth of her baby.

Comparisons regarding privacy differences surfaced repeatedly. Carrie was struck by women openly breastfeeding. Elizabeth mentioned being surprised of physicians checking wounds in front of others.

All participants described the poverty from their own reference points. Poverty manifested itself in the schools, healthcare settings, and external surroundings in general. Amanda compared the schools and resources to those in the United States.

The school didn’t…have a lot of the equipment that we get to use for our labs…we saw one of their chemistry labs, and it was nothing like they have here.

Kam compared the living conditions to her norm. She stated, “The conditions were …so worn down and by our standards …very unclean…filthy.” Two participants made reference to the impact of seeing homeless children. The constant comparisons highlighted the cultural divide that was present throughout the narratives.

Emotional Journey

Fear, frustration, shock/surprise, and sympathy comprised the emotional journey that emerged from the data. Sympathy carried across the narratives as participants expressed sadness for the Ecuadorians. Empathy, or having a genuine emotional connection with the Ecuadorians, was expected yet missing from the data. Fear was evident as narratives revealed fear related to personal safety, the
language barrier, insects and animals in the rain forest, and touring hospitals. Erin described her experience arriving in Ecuador:

…it was scary because you don’t know any Spanish and everybody’s looking at you because you’re a different color…they’re wondering why you are there.

Sherrell experienced similar anxiety upon arrival to Ecuador. One of the security guys…picked up one of my bags to put it up on the screening shelf and then he wanted a tip for it…how do you turn down a security person when he asks for a tip? …they're like ‘we didn’t get the tips…tips, tips, tips…They are just looking for tips…that was just really overwhelming and kind of scary…

Seven participants voiced frustration during the experience. Reasons for frustration included language difficulties, frustration with the inappropriate behaviors of peers, and traveling at length with peers. Dawn stated, …probably the thing I struggled with the most…traveling 24/7 with 20-some other people that I didn’t know. I found it really frustrating… I almost felt embarrassed to be part of the group… these people I was with just whip out their cameras and start taking pictures of…dying people...

One participant expressed frustration regarding the inequities in resources. Most participants verbalized frustrations about their personal living conditions.

**Shock/surprise**

The third feeling expressed throughout the narratives was shock or surprise. In reference to conditions in a nursing home, Erin stated, “I can’t believe this is legal.” Jen stated, The one thing that really surprised me was that children work…young children. They could be less than ten years old. I was rather shocked to see the children that were begging in the street trying to sell pieces of candy…for money.

Amanda discussed living conditions in the rain forest. The town was really poor…it’s…something that I never thought I would see personally…you always see it on Discovery® (TV), or whatever… But there was actually people that still live that way…

Along the continuum of the emotional journey, sympathy as opposed to empathy, emerged from every narrative. Carl Rogers’ (1959) definition of empathy was applied:
The state of empathy, or being empathic, is to perceive the internal frame of reference of another with accuracy, and with the emotional components and meanings which pertain thereto, as if one were the person, but without ever losing the “as if” condition. Thus it means to sense the hurt or the pleasure of another as he senses it, and to perceive the causes thereof as he perceives them, but without ever losing the recognition that it is as if I were hurt or pleased, etc. If this “as if” quality is lost, then the state is one of identification (p. 210-211).

Participants recognized the sadness of poverty and when questioned about their feelings discussed that “it was sad,” followed by acceptance. When asked how she felt, Angie stated,

I was very sad but I also understood that it’s kind of like it was during the Great Depression here, that theirs is just all the time there, but they accept it…at first it was a big cultural shock and you just want to go out and buy all these shoes, but then, after the third or fourth day, you decided that they are happy so we need to be happy for them.

Two participants displayed beginning signs of empathy, although, the overall tones of the narratives were sympathetic.

**Elaborating and/or Learning New Meaning Schemes**

All participants achieved learning demonstrating elaborating and/or learning new meaning schemes. According to Mezirow (1997), elaborating meaning schemes is the process of adding to an existing point of view. Learning new meaning schemes is the process of establishing new points of view (Mezirow, 1997). Learning new meaning schemes involves encountering a new situation and creating new meaning schemes as dictated by one’s established habit of mind. Elizabeth described learning the difference of family roles of care-giving while touring a pediatric hospital.

...families are much more involved in care than they are here in the States…parents were there for this one boy…they carried him to the bathroom… and I think in the States that that really wouldn’t happen…but families seem to be doing all of the care really, except for medications and treatment-type things…

**Transforming Meaning Schemes**

Eight participants demonstrated transforming meaning schemes or experiencing a disorientation and critical reflection about a prior misconception resulting in a change in point of view (Mezirow, 1997). All participants claimed to have a different view about living in the United States after seeing life in
Ecuador. They expressed new appreciation of resources and living conditions. The synopsis of Angie after seeing the maternity ward illustrated her new view.

…it was amazing to see how good we have it… the nurses take care of 20-50 people and the patients don’t have call lights, and the families are really involved…We have it so different, but we think that our way is right. But maybe it’s not right…

Participants’ meaning schemes were transformed, but their habit of mind remained the same as they displayed no intent to make changes in their future actions, personally or socially.

**Blocks to Perspective Transformation**

Three potential blocks to transformation were identified: egocentrism/emotional disconnect, perceived powerlessness/being overwhelmed, and vacation mindset. Egocentrism/emotional disconnect was apparent throughout the narratives. Doris referred to the elderly being “herded” to the showers. This metaphor may have been an attempt to describe the drastic differences in showering routines, yet the language projects a disconnect from this human experience. An animal metaphor indicates seeing the elders as something other than as human beings similar to herself. After discussing a neonatal death from lack of resources, Kam responded, “I guess that’s just the way the cookie crumbles sometimes.” Carrie described feeling sad about the lack of books and toys in the preschool. When she started considering this, she distracted herself from the sadness of circumstances by protecting herself with hand sanitizer. She stated she kept sanitizing every five minutes.

Amanda displayed emotional disconnect related to individuals receiving vital health care despite having experienced a similar dilemma.

…everybody…that needed dialysis…couldn’t have it…They might do some kidney transplants, but the patients have to pay for all of that themselves…I think that’s fine…if they are able to afford it that’s great. If not, then, that’s just another part of the life cycle. My [parent] had an [organ] transplant, and I know that it cost a lot of money…what all [he/she] had to go through and my family…I know if you’re in the situation, sometimes people are desperate to keep their family around …so they’re willing to do anything.

The most compelling example of emotional disconnect was provided by Erin in her description of photographing a dying man in the emergency room.
There was a man that was 24 or 25…he was not in very good condition at all…he was shaking... I diverted my attention to him and later we found out that his complete intestines were laying top of his abdomen…that was pretty interesting. Showing that picture to people back here, they were just ‘oh my gosh!’ …That’s not something you see everyday…I’m glad I’m not in his shoes.

This example is profound in the lack of emotion present in the narrative in the student’s response to the situation. Further, the action of taking the photo, and later showing it to others, accords neither dignity nor personhood to the man who had been shot.

**Perceived Powerlessness/Being Overwhelmed**

Perceiving oneself as powerless or being too overwhelmed by the enormity of the situation arose as a potential block to perspective transformation.

Dawn discussed a woman who was paralyzed.

It’s horrible! It makes me feel guilty and frustrated and powerless… you want to think to yourself ‘well, I’m gonna go home and I’m gonna collect wheelchairs and I’m gonna send them to Ecuador’ but in reality, it’s really hard to do that. ‘Because, even if I was to come back…and collect a hundred wheelchairs, shipping them down there is going to be ridiculously expensive…It makes you feel very helpless.

**Vacation Mindset**

Another possible block to the perspective transformation was a vacation mindset. Carrie discussed her shopping adventure followed by going to dinner and watching a soccer game. Jen expressed excitement in getting a picture holding a boa constrictor. Kam stated,

This is going to be fun…an adventure!...it was almost so organized that at some points, I’m like…I’m on vacation!'...we were served three meals a day for two weeks!

Dawn verbalized frustration as she did not have her freedom as she would on a vacation.

Ecuador was such a teaser for me. It was like ‘oh look, here’s a country you can’t go explore or do anything. Just do exactly what we tell you’ – oh! It just drove me crazy! So, definitely people who have never traveled before would get the most out of this.

Experiencing a vacation may have been an expectation conflated with study abroad.
DISCUSSION

The narratives gathered from this research revealed new and concerning information. Eight participants demonstrated learning from the study abroad experience, but not the grand type of transformative learning described in the literature (Evanson & Zust, 2006; Genz, 2007; Levine, 2009; Reimer Kirkham, Van Hofwegen, & Pankratz, 2009; Ruddock & Turner, 2007; St. Clair & McKenry, 1999) No participants discussed intent to make personal changes or engage in social action.

Perhaps the most disconcerting of the impediments to transformative learning were emotional disconnect and egocentrism. Egocentrism was apparent as defense mechanisms such as rationalization and reaction formation surfaced in the narratives. These defense mechanisms served to protect from the anxiety created by viewing situations such as extreme poverty. The transitions in the narratives were rapid; descriptions of difficult topics were followed by a change to a more benign topic. This quick transitioning may have been a sign of early empathic feelings, but immediately shifting away to self-protect.

The most distressing of the examples of emotional disconnect occurred with the student who photographed the man in the emergency room. The man is described as “shaking” and later in the narrative it is clear he is mortally wounded, yet the student shows no emotion in the telling of the narrative. No recognition that both the act of photographing this person and the act of sharing the photo with others is clearly in conflict with Provision One in the Nurses Code of Ethics which states: The nurse, in all professional relationships, practices with compassion and respect for the inherent dignity, worth and uniqueness of every individual, unrestricted by considerations of social or economic status, personal attributes or the nature of health problems (ANA, 2001, p. T).

A limitation of this study includes the inability of participants to validate findings. The research question and interview prompts may not have facilitated participants to reveal their transformations. Students, unaware of the purpose of the inquiry, may have better addressed their transformations if the inquiry were known. As in all qualitative work, this study is limited in generalizability.

IMPLICATIONS AND RECOMMENDATIONS

Research presenting negative outcomes is found less commonly in the literature, yet, educators stand to gain from this knowledge. Transformative
learning is not a guaranteed result of a study abroad experience. International educators must carefully consider preparation efforts, objectives, teaching strategies, and assessment methods when facilitating study abroad courses to maximize learning. This study supports the need for student preparation that will allow students to be open to persons and cultures and to respond to each person’s inherent dignity with compassion rather than disconnect. This preparation must be didactic as well as experiential. Providing information is not enough. Students must be well prepared for and supported in their emotional journey. Select strategies, including explanation of the global market, systemic oppressors, and international relations will help develop students’ contextual understanding of the situations they encounter. Debriefing sessions, reflection, and problem solving groups will foster coping skills and a capacity for empathy rather than emotional disconnect. The authors believe most American ADN students are capable of transformation. International experiences offer excellent opportunities for nurse educators to teach about human rights, social action, and interconnectedness necessary to bridge nursing students to the global community.

REFERENCES


