



Changes in Attitudes and Beliefs Regarding Intercultural Academic Communication in Nursing: Assessing A Collaborative Online International Learning (Coil) Program Between Japan and the Usa

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Abstract

Introduction: As technological advances have generalized the implementation of virtual education (VE), mobility programs aimed at promoting cultural competence or cultural humility have emerged. This study examines the impact of a Collaborative Online International Learning (COIL) program on the attitudes and beliefs of Japanese and American undergraduate nursing students regarding academic communication on the international stage. Methodology: We designed a five-part, anonymized survey questionnaire containing 128 six-point Likert-scale questions pertaining to undergraduate students' demographic information, self-perceived individual characteristics, motivation towards using English as a lingua franca for academic purposes, communication style in English or Japanese, and, finally, knowledge, attitudes and practices in academic communication. American students also provided feedback through semi-structured focus group discussions. Findings: After completing the COIL exchange, Japanese nursing students perceived differences in way they behaved compared to American counterparts. The pre-post component of the questionnaire revealed that the course significantly changed attitudes and beliefs in Japanese nursing students. Conclusion: Facilitating online exchanges through COIL activities leads to significant changes in Japanese students' attitudes and beliefs and can contribute to increasing general openness and cultural awareness with relation to nursing practice and research.

Keywords: *Online learning, intercultural nursing, academic communication, curriculum assessment*

1. Introduction

1.1 Internationalization through immersion: the case of nursing education

Among health professionals, the ability to communicate cross-culturally used to be labelled cultural competence [1]. This concept has never been clearly defined [2] but was generally understood as the acquisition of knowledge, skills, and attitudes necessary for providing care to members of a cultural minority [3]. However, contemporary literature has challenged the concept of cultural competence as it mostly focused on developing expert knowledge about the patient's culture rather than addressing the healthcare provider's ability to respectfully consider, and act towards members of other cultures [4]. As a result, the new concepts of cultural safety [5] or cultural humility [6] have been introduced to describe the practice of healthcare providers critically reflecting on their own cultural identity and the impact of that culture on the care practice. In this study, we will consider cultural humility as a lifelong self-reflection process to critique the power relationship between patients and healthcare providers as well as the privileges and biases introduced by the providers' cultural identity.

Learners can further their cultural humility through interactions and that cultural humility allows learners in return to become more aware of multiple perspectives and sustain durable growth. Simulation activities or active learning exercises provide learners with opportunities to enhance their cultural awareness [7]. More extensively, study abroad programs are generally thought to provide authentic opportunities for learners to engage with others in meaningful ways and therefore affect personal growth [8]. Despite these clear transformative benefits, study abroad programs are restricted to a small number of learners due to financial, logistical, or personal barriers [3]. Therefore, many higher education institutions have developed programs aimed at "integrating international and intercultural dimensions into the formal and informal curriculum for all students within domestic environments" [9].

1.2 Collaborative Online International Learning

Commonly, nursing curricula implement a variety of pedagogical designs to enhance cultural humility and meet the goals of internationalization in universities. Among those goals are language acquisition,



establishment of international collaborations between faculty members and students, and acquisition of an intercultural perspective by students [10]. One design that has gained popularity in the past decade is collaborative online international learning (COIL), that uses internet-based tools to foster meaningful interactions between faculty members and students [11]. This pedagogical strategy allows a greater number of students than could afford to travel to another country to experience cultural immersion.

Compared to other internet-based learning, COIL is characterized by the fact that (1) the program is cocreated and cotaught by faculty from different international institutions, (2) students are graded at their own academic institution according to independent learning objectives, (3) students engage in interactive problem-based activities and projects with international counterparts [12].

Past studies have highlighted the need to generalize quantitative and mixed protocols to assess the effectiveness of COIL [13-14], possibly with standardized metrics and control groups. By using a questionnaire and focus group discussions, we decided to supplement existing knowledge about COIL and its use to alter students' attitudes and beliefs regarding intercultural communication.

1.3 Objectives

This paper aims to describe the transformational effect of COIL on Japanese nursing students' attitudes and beliefs regarding intercultural communication for academic purposes.

2. Methodology

This article reports the changes in attitudes and beliefs of nursing students in the USA and Japan after engaging in COIL program. This study focuses on survey questionnaire data and transcripts from student interviews to establish the impact of the program on students' openness, self-awareness, willingness to grow, capacity for self-reflection or self-renewal, and respect for different views or opinions. All these elements have been selected as important components of students' capacity to acquire a more intercultural perspective.

2.1 Population

Participants in this program assessment were eight Japanese (2nd and 3rd year undergraduate) and five American (3rd year undergraduate) nursing students who engaged in the COIL exchange program between November 2020 and March 2021 (40 days of interaction). Enrolment in the course was voluntary and so was the participation in the survey.

2.2 Survey questionnaire

Our survey questionnaire was modified after the questionnaire produced by Fanitini [15] to assess cultural competence. It included a demographic section followed by four sections and 111 questions or statements that participants could answer or agree with using 6-point Likert scales. We investigated specifically four psychometric dimensions that were presented in the Beliefs, Events and Values Inventory (BEVI). The first psychometric dimension relates to students who have a strong sense of will, low tolerance for mistakes, generally positive thinking, a tendency to analyse things superficially (BEVI Self-Certitude). The second dimension relates to students displaying introspection, awareness of complexity of self, consideration for human experiences, and tolerance for uncomfortable thoughts (BEVI Self-Awareness). The third dimension considers students' awareness of self and others and their ability to perceive the world in a non-Manichean way (BEVI Socioemotional Convergence). Finally, the fourth dimension relates to students' ability to hold progressive point of views regarding social and cultural issues (BEVI Sociocultural Openness). Some examples of questions for each psychometric dimension are shown in Table 1.

While the first three sections examined how Japanese students perceived their own personalities, their motivation towards using English to communicate internationally, and communication strategies, the last section of the questionnaire required students to assess how they altered their communication strategies over the 40-day course.

The questionnaire was administered to Japanese students after completing the program. Post program semi-structured interviews were conducted with American students in the weeks that followed the program using prompt from the questionnaire.

Table 1: Samples of questions or statements used in the first three sections. Questions pertain to how students view themselves, view others belonging to the same culture, and viewing students from another cultural background



	Section sampled	Question type	Question sample
Self Certitude	1	Personality	In front of a Japanese audience, I look self-reliant
	1	Personality	In front of an American audience, I seem set in my ways
Self Awareness	2	Motivation to engage	During the interactions, I survived as best as I could
	2	Motivation to engage	After COIL, I want to improve my linguistic skills
Socioemotional Convergence	3	Communication strategies	In academic arguments in English, the main idea is usually stated first
	3	Communication strategies	When speaking with people from ≠ cultural backgrounds, American students usually adapt the type of eye contact
Sociocultural Openness	3	Communication strategies	When speaking with people from different cult. background, I stay closer to other Japanese students
	1	Personality	In front of a Japanese audience, I appear open-minded

2.3 Data analysis

For the first three sections, we used paired t-tests to investigate whether student perceived a difference in the way they saw themselves (reflection) and the way they believed American students viewed them (imagined external point of view). Any statistical difference between responses would relate to perceived distinctions between the “Japanese” and the “imagined American” points of view. In the last section, pre-post paired t-tests were conducted to examine whether students perceived any improvement in their academic communication strategies. All calculations were conducted using the online program JASP.

For the focus-group interviews with the American students, we conducted a thematic textual analysis based on interview transcripts.

3. Findings and discussion

Due to the small sample size (N=8) the significance of our survey results cannot be generalized. However, our findings may suggest interesting effects of COIL on Japanese nursing students and act as a basis for further studies.

3.1 Survey questionnaire

Our analysis of students’ responses in the first three sections following the demographic data entry revealed that Japanese students perceived their communicative attitudes as being indistinguishable from their American counterparts overall. In all four psychometric scales that we considered, the higher levels of similarity were observed for the category called Self-Certitude in the BEVI (73% of responses are statistically indistinguishable). This suggests that either Japanese students indeed are perceived the same way, or that they are not aware of the behavioral distinctions that may exist. Japanese students perceived more distinctions for questions pertaining to the other three psychometric dimensions: Socioemotional Convergence, Self-Awareness, and Sociocultural Openness (respectively 50%, 53%, and 57% indistinguishable).

Notably, Japanese students believed that American students viewed them as more set in their ways and more self-reliant as they perceive themselves. They also believed that they appeared more open-minded and adaptable to other ways to American students than to other Japanese peers. Finally, Japanese students felt that they appeared less self-reliant or respectful of others’ opinions when interacting with American students than Japanese students. Further research is needed to confirm the emerging trends observed in this study due to the very small sample size.

For the pre-post paired t-test, across all dimensions, Japanese students perceived significant decreases in Self Certitude and increases in Socioemotional Convergence, Self-Awareness, and Sociocultural Openness (Table 2). This suggests that interacting with nursing students from a different cultural background motivated Japanese students to share and exchange opinions and compare communication strategies.

3.2 Semi-structured interviews in focus groups

American students expressed their enthusiasm for the opportunity to engage in intercultural exchange during the pandemic. Most of their perceived gains related to personal enrichment and discipline-



specific knowledge: most participants mentioned that a standout learning experience occurred during a group discussion about healthcare systems in which they learned both about the Japanese healthcare system and the American welfare system. This observation illustrates the importance of curating the content of online activities to ensure they are both informative, relevant to participants, and dependent on the collaboration between international teams of students.

Perceived limiting factors for COIL included the timing of the program and its duration. American students face a very heavy workload in the period of time leading to the Christmas holidays and the time available for COIL interactions was thus limited. Future implementations should consider making COIL programs available throughout the year to promote engagement.

Table 2: Change Δ in attitudes and beliefs related to academic communication using English as measured using the four psychometric dimensions included in this study. Change is understood as a comparison between student situations before the program and after the program. Negative change (=decrease) was only observed for Self Certitude. p values indicate the likelihood of the change being due to the observed variability within the sample.

	Question	p(T<=t)	Change Δ		Question	p(T<=t)	Change Δ		Question	p(T<=t)
Self Certitude	V-2-05	8.00E-02	(0.75)	Socioemotional Convergence	V-1-03	3.30E-02	1.00	Sociocultural Openness	V-1-01	1.85E-02
	V-2-09	1.50E-02	(1.13)		V-1-04	5.10E-02	1.13		V-1-02	7.25E-03
	V-3-01	1.36E-04	(1.38)		V-1-05	1.40E-01	0.63		V-1-07	3.31E-02
	V-3-02	6.00E-03	(0.88)		V-1-06	9.50E-02	0.63		V-1-08	6.20E-03
	V-3-06	1.10E-02	(1.25)		V-2-02	3.00E-03	0.75		V-2-07	1.99E-02
Self Awareness	V-2-01	4.80E-02	0.75		V-2-06	3.30E-02	0.50			
	V-2-03	4.27E-05	1.13		V-2-10	2.60E-02	1.13			
	V-2-04	2.10E-02	0.88		V-3-03	4.90E-02	0.63			
	V-2-08	1.00E-03	1.00		V-3-04	3.60E-02	1.38			
	V-3-05	2.00E-02	0.75		V-3-07	3.30E-02	0.50			
					V-3-08	1.00E-03	1.75			
					V-3-09	5.00E-03	1.25			

4. Conclusion

This preliminary examination of a newly developed COIL program for nursing students suggests that this virtual course may change students' attitudes and beliefs towards higher levels of openness and awareness. Further research is required to validate the findings of this study for both Japanese students and their American counterparts. Those studies may gain in integrating a control group as part of their design to unequivocally ascertain the impact of COIL on the cultural humility of nursing students.



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