

The Effect of Re-unification Education on Empathy and Multicultural Competence of Nursing-College Students

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Abstract

Background: South Korean society is increasingly multicultural. As the percentage of North Korean defectors, married immigrants, and foreign workers increases, nurses will encounter more patients (and their family members) from diverse cultural backgrounds, which can pose a substantial burden. There is also a need for multicultural education among young people generally in South Korea. The purpose of this study was to identify the effects of an educational program about re-unification on nursing student's empathy and multicultural competence.

Method: A six-session re-unification educational program was developed based on a cultural-competency model. It was implemented outside the regular nursing curriculum among first-year and second-year nursing students from September to October 2019. Data were collected from 65 students: 32 in the experimental group and 33 in the control group.

Finding: Multicultural "capacity" increased in the experimental group relative to the control group ($t=2.60$, $p<0.001$). The results indicate that re-unification education can build and strengthen the multicultural competence of nursing-college students.

Conclusion: This result can be an important part of preparation for re-unification, because these students will be the main providers of nursing care for the multicultural population at that time.

Keywords: *Re-unification educational program, nursing-college students, multicultural competence, empathy*

Introduction

South Korean society is becoming more multicultural. Already, North Korean defectors, married immigrants, and foreign workers make up more than 4% of the population^[1]. As that percentage increase, nurses will encounter more patients (and their family members) from diverse cultural backgrounds, which can be a substantial burden on those nurses^[2]. Existing evidence indicates a need for multicultural education among young people in South Korea. Many South Korean college students were found to have a negative attitude toward the provision of preferential benefits to North Korean defectors^[3]. In addition, South Korean nursing students were found to have a very low "supportive attitude" toward North Korean

defectors^[4], nursing students' multicultural awareness of North Korean defectors was different from their awareness of other cultures^[5]. This indicates that nursing students would benefit from a more positive awareness of North Korean defectors. There is room for education-based improvement with regard to these students' empathy and multicultural competence. Multicultural competence comprises perception, knowledge, and skills. Cultural awareness in particular is a key element of multicultural competence, and a previous study^[6] indicated that competence including cultural awareness is related to the ability to be empathic. This is consistent with a need to increase both multicultural competence and the ability to be empathic among college students. To be empathic here comprises

taking an inclusive attitude to effectively synchronize feelings, in the interests of altruistic behavior^[7]. It also includes taking an affirmative role to acquire the knowledge needed to integrate well with people of other cultures and to avoid or to end prejudice^[8]. Looking forward toward potential re-unification of north and south, we see a need for education that begins with an understanding of North Korean people and society, as well as an understanding of North Korean defectors from a multicultural perspective^[9]. With consensus on re-unification recognized as the most important factor in re-unification education^[10], positive perceptions of North Korean defectors can be promoted, together with understanding of North Korea, which may contribute to the success of eventual re-unification. Bringing latent attitudes and feelings to light can increase empathy and multicultural competence. However, it is still difficult to find a program combining re-unification education with strategies for enhancing multicultural competence. We evaluated a re-unification educational program for nursing-college students. The program was developed based on a model of cultural competence, and its effects on the students' empathy and multicultural competence were measured.

Study Objectives

The goal of this study was to examine the effect of a re-unification educational program on empathy and multicultural competence of nursing-college students. There were two hypotheses. **Hypothesis 1:** Multicultural competence will increase in the experimental group, i.e. the group receiving the re-unification education, relative to the control group. **Hypothesis 2:** Empathy will increase in the experimental group relative to the control group.

Methods

Study design

This was an experimental study. The two outcome variables (empathy and multicultural competence) were measured both before and after the intervention (the re-unification educational program) in both groups.

Participants

The participants were first-year and second-year students at a nursing college in D city. To minimize any

influence of students' motivation to participate in the program, the control group comprised students who were interested in the program but could not participate because of other academic commitments. After the end of the study, the control group was provided with the contents of the program in lectures abbreviated to two hours. The sample size was computed using G*power 3.1.9^[11]. In a previous study of the effect of an educational program on multicultural competence^[12], the effect size was 0.97. For the independent-sample t-test with an alpha level of 0.05, an effect size of 0.50, and a power of 0.85, the minimum number of students required for each group was 30. At the start of the study, 35 students were in the experimental group and 37 were in the control group, but 3 in the experimental group participated in only part of the program and 4 students in the control group withdrew their consent. Thus, for the final analyses $n=32$ for the experimental group and $n=33$ for the control group.

Measurements

Empathy and multicultural competence were measured using structured self-report questionnaires. The questionnaire used before the program had 3 items asking about general characteristics, 28 items to measure empathy, and 28 items to measure cultural exchange capacity. The follow-up questionnaire included the same 56 items measuring empathy and multicultural competence

Multicultural Competence

Multicultural competence was measured using the Korean-language version of the Cross-Cultural Competence Inventory (CCCI)^{[13], [14]}. It is a 28-item measure of commitment, self-efficacy, and cultural empathy, using a 5-point Likert-type scale. Six of the question-items are negatively worded, so they must be reverse-scored. Higher total scores indicate greater capacity for cultural exchange (maximum score: 5). Coefficient α (internal-consistency reliability) was 0.84 in the baseline survey.

Empathy

Empathy was measured using the Interpersonal Reactivity Index (IRI)^[15]. It has 7 question-items measuring perspective taking, fantasy, empathic

concern, and personal distress, using a 5-point Likert-type scale. Nine of the question-items are negatively worded, so they must be reverse-scored. Higher total scores indicate greater empathy. Coefficient α was 0.74 in the baseline survey.

Intervention: The re-unification educational program

The intervention was a re-unification educational program that was implemented as an extracurricular activity. The program was based on a model of cultural competence^[16]. Cultural competence is a synthesis of acquired knowledge and skills in cultural awareness, cultural knowledge, and cultural sensitivity. During the first session of the program, after the participants completed the questionnaires on cultural exchange and empathy, the content focused on understanding the backgrounds of other cultures, with emphasis on the basic idea of a single Korean people. The next part of the program comprised sessions two through four, and it focused on health, inequality, and education for North Koreans and defectors. During the fifth session, cultural sensitivity was promoted by helping the students learn how the Korean language is used differently by people in the north and in the south, and the students practiced communication in role play. The sixth and final session focused on planning and preparation for re-unification based on empathy and multicultural competence. There was one 60-minute session per week.

Data Collection

Data were collected from September through October 2019. The recruitment announcement was posted for two weeks on a bulletin board designated by the school. To students who indicated their interest in participating, the researcher explained the purpose of the study, the

guarantee of anonymity, and the rights of participants. Students who could participate in all six sessions of the program were assigned to the experimental group, and those who had commitments that would prevent them from participating in all six sessions were assigned to the control group. After informed consent was obtained in writing, students in both groups completed the baseline questionnaire. The baseline questionnaire included the scale for measuring empathy and the scale for measuring the capacity for cultural exchange. On the questionnaire the students used a nickname rather than their actual name, and the questionnaires were collected using an opaque box. After the six weekly sessions, all students completed a follow-up questionnaire that included the same two scales again. The nickname used before was used again, and again the questionnaires were collected using an opaque box. After the follow-up data were collected, students in the control group received the contents of the program in two hours of lectures.

Statistical Analysis

The data were analyzed using IBM SPSS 22.0 software. Baseline homogeneity of empathy and multicultural competence between the groups was tested using the independent-samples t-test. The *a priori* hypotheses regarding the effects of the program on empathy and on multicultural competence were tested using the before-after change in scores (independent-samples t-test).

Findings

Homogeneity of demographic characteristics between groups

The two groups did not differ significantly with regard to age, gender, or year in school (Table 1).

Table 1: Tests of baseline homogeneity of demographic characteristics between groups (n=65)

| Characteristic | Division | Experimental group (n=32) | Control group (n=33) | t or χ^2 | P |
|----------------|-------------|---------------------------|----------------------|---------------|-------|
| | | n(%) or M \pm SD | n(%) or M \pm SD | | |
| Age | | 20.47 \pm 0.84 | 19.94 \pm 1.35 | 1.90 | 0.063 |
| Gender | Men | 4 (12.5%) | 7 (21.2%) | 0.88 | 0.349 |
| | Women | 28 (87.5%) | 26 (78.8%) | | |
| Year in school | First year | 11 (34.4%) | 17 (51.5%) | 1.95 | 0.163 |
| | Second year | 21 (65.6%) | 16 (48.5%) | | |

Inter-group homogeneity of empathy and of multicultural competence at baseline. At baseline, the two groups did not differ significantly with regard to empathy or multicultural competence (Table 2).

Table 2: Test of baseline homogeneity of dependent variables between groups (n=65)

| Variable | Experimental group (n=32) | Control group (n=33) | t | p |
|--------------------------|---------------------------|----------------------|------|-------|
| | M±SD | M±SD | | |
| Multicultural competence | 3.50±0.35 | 3.49±0.34 | 0.03 | 0.980 |
| Empathy | 3.46±0.32 | 3.33±0.27 | 1.78 | 0.079 |

Effect of the re-unification educational program on empathy and on multicultural competence

Table 3 shows the results of tests of hypothesis regarding the effects of the re-unification educational program on multicultural competence and on the ability to be empathic. **Hypothesis 1:** Multicultural competence increased by 0.20±0.24 points in the experimental group, but it decreased by 0.03±0.26 points in the control group (t=2.60, p<0.001). Therefore, hypothesis 1 was supported. **Hypothesis 2:** Empathy increased by 0.05±0.20 points in the experimental group, and it increased by 0.13±0.22 points in the control group (t=-1.43, p=0.157). Therefore, the second hypothesis was not supported.

Table 3: Empathy and multicultural competence before and after re-unification education (n=65)

| variable | group | Baseline | After the intervention | Pre-post difference | t | p |
|--------------------------|---------------------------|-----------|------------------------|---------------------|-------|---------|
| | | M±SD | M±SD | M±SD | | |
| Multicultural competence | Experimental group (n=32) | 3.50±0.35 | 3.70±0.34 | 0.20±0.24 | 2.60 | < 0.001 |
| | Control group (n=33) | 3.49±0.34 | 3.47±0.38 | -0.03±0.26 | | |
| Empathy | Experimental group (n=32) | 3.46±0.32 | 3.51±0.33 | 0.05±0.20 | -1.43 | 0.157 |
| | Control group (n=33) | 3.33±0.27 | 3.46±0.26 | 0.13±0.22 | | |

Discussion

Empathy and cultural competence are essential for high-quality nursing^[13]. Re-unification education for multicultural competence may improve students’ understanding of North Korean defectors. We investigated the effects of such education on nursing-college students’ empathy and multicultural competence. At baseline, the average score on the scale measuring multicultural competence was 3.50. A very similar result, 3.48, was found in a study of 663

college students^[5]. A very similar score, 3.55, was found in fourth-year college students^[5], and in that study multicultural competence was higher in female college students than in their male counterparts. On the empathy scale, the average score was 3.39, which was slightly lower than the average score of 3.47 found previously^[17] in a study of 201 nursing students. Research on larger numbers of students is needed to determine whether that difference is reproducible and, if so, whether it is due to, for example, the students’ year in school. The results of this study support the hypothesis that the re-

unification educational program increased multicultural competence. This is consistent with the increase in multicultural competence in a study of another program for nursing-college students^[13]. In at least one previous study^[13], the program tested was included in the curriculum and lasted for 14 weeks. While in this study the six sessions were implemented as an extracurricular program, still the same effect was found. Therefore, the goal of promoting multicultural competence can be achieved at least to some extent through a short-term program that students are not required to attend. The re-unification educational program apparently had no effect on the students' empathy. Others^[18] have found that multicultural nursing education based on team learning did have a positive effect on empathy. Their program differed from the one in this study in that it included direct contact with people of other cultures. Thus, future programs probably should include experiences such as exchange activities with North Korean defector nursing students^[19,20] or special lectures given by North Korean defectors themselves. The program tested in this study was developed on the basis of a conceptual model of cultural competence, and it combined multicultural education with content aimed at increasing students' understanding of re-unification ^[21]. Another important point is that students who were not motivated to participate were not included in either group. While that minimized any influence of students' motivation to participate (because all students in both groups were motivated to participate), it also means that no conclusions can be drawn regarding students who were not motivated to participate. Therefore, future work should include large randomized controlled studies to test the potential effects of students' motivation to increase their empathy and their multicultural competence.

Conclusion & Recommendations

This re-unification educational program can increase the multicultural competence of nursing students. Future research should include randomized controlled trials of larger numbers of students. Also, to increase empathy, the program should include direct multicultural experiences.

Ethical Clearance: Not required

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Conflicts of Interest: None

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