

Effects of Interpersonal Competence and Psychological Well-being on Career Decision-making Self-efficacy of Nursing Students in South Korea

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Abstract

This study was designed to investigate the effects of interpersonal competence and psychological well-being on career decision-making self-efficacy of nursing students in South Korea. The samples were recruited by university students who were nursing students C-do and D city in South Korea. A total 185 samples were collected for this study. Data analysis was performed using the SPSS 24.0 program. Three models extracted during the hierarchical regression analysis were tested to determine the predictors of career decision-making self-efficacy. In the first model, personal factors such as life satisfaction were found to be significant and accounted for 20.9% of the variance. In the second model, which included interpersonal competence and psychological well-being, only interpersonal competence and psychological well-being were found to be significant. The final model, which included both personal and main variables, accounted for 46.0% of the variance. To increase nursing students' career decision-making self-efficacy, interpersonal competence, and psychological well-being of nursing students should be improved.

Keywords: Nursing students, Interpersonal competence, Psychological well-being, Career, Self-efficacy.

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Introduction

As university students advance into the professional society (Kim et al., 2007), they have to be prepared for the transition from student to professional. They need to make practical and concrete preparations for future careers (Kim, 2013). Nursing students tend not to worry about their careers because of the high employment rate (Kim et al., 2016). However, because of this, even after becoming a nurse, they are not satisfied with their job, resulting in an inability to adapt and high job turnover. Hackett and Betz proposed career decision-making self-efficacy (CDMSE) in career theory. It refers to the belief in an individual's ability and the potential to accomplish career-related tasks (Betz et al., 1996). It plays a central role in making career-related decisions for career development and job performance (Betz et al., 1996). It was also found that CDMSE was also related to psychological well-being (Hirschi, 2011).

Psychological well-being is a concept that includes positive interpersonal relationships, self-demand, insight into the environment, the purpose of life, autonomy, and personal growth (Ryff, 1989). It is used as a tool for predicting interpersonal abilities, life satisfaction, and whether an individual will function well as a member of society (Ryff, 1989). People with high psychological well-being are well aware of the others' contributions and have a tendency for high appreciation (Jun et al., 2015). In previous studies, college students were likely to have low psychological well-being because they revised patterns of social interaction and their experience expanded interpersonal relationships (Kim et al., 2014). Psychological well-being is related to interpersonal ability (Jang et al., 2020), and interpersonal problems increase when psychological well-being is low (Cheon et al., 2013). Moreover, previous studies have shown that psychological well-being has a significant relationship with CDMSE (Jung, 2014).

Nursing is a study in which human relationships are central, and interaction between subjects is very important, and nurses need interpersonal skills (Oh et al., 2016). Interpersonal competence is the ability to maintain relationships with others and to understand and resolve conflicts or problems arising from interaction (Thurman, 1971). Nursing students experience a variety of stresses in clinical practice, including interpersonal stress. In particular, stress from fear or anxiety from interpersonal experiences is severe (Kim, 2002). In a study of middle school students, interpersonal communication was found to influence CDMSE (Yoon et al., 2014). In a study of female students, interpersonal competence was found to have a significant effect on career maturity (Jung et al., 2017).

Psychological well-being and interpersonal competence are very important to nursing students. It is very important to increase self-efficacy in career decision making to increase adaptability as they become nurses. Moreover, it is necessary to examine the factors influencing them to prepare a strategy for enhancing CDMSE. Therefore, this study aimed to provide fundamental data for the

development of programs for nursing college students to improve their CDMSE by confirming the impact of psychological well-being and interpersonal ability on it.

Materials and Methods

Study design and sample

This descriptive cross-sectional study examined the effect of interpersonal competence and psychological well-being on CDMSE. The subjects of this study were nursing students at a university in C-do and D city, Korea, who voluntarily agreed to participate. A total of 191 subjects responded to a self-report questionnaire; the response rate was 95.5%. Of these, six questionnaires were excluded from the analysis because of insufficient data. Finally, 185 questionnaire responses were analyzed.

Measurement

Interpersonal competence was measured using the Interpersonal Competence Questionnaire (ICQ), developed by Buhrmester et al. (1988), which was translated and revised by Han and Lee (2014). This tool consists of 31 items scored on a 5-point Likert scale. Higher ICQ scores indicated higher interpersonal competence. In Buhrmester et al.'s study (2014), the reliability of the instrument was shown by a Cronbach's alpha score of .83. In this study, the score was .93.

Psychological well-being was measured using the Psychological Well-Being Scale (PWBS), which was developed by Ryff(1989) and revised by Cho (2007). The PWBS consists of 18 items across six sub-domains: self-acceptance, positive relationships, autonomy, dominance over the environment, life goals, and personal growth. Items are scored on a 5-point Likert scale; higher scores indicated higher psychological well-being. Cho's study (2007) had a Cronbach's alpha score of .80, and in this study, the score was .79.

Career decision-making self-efficacy was measured using the Career Decision-Making Self-Efficacy Scale Short-Form (CDMSES-SF) developed by Taylor & Betz (1983) and translated and revised by Lee & Lee (2000). This instrument consists of 25 questions and was scored on a 5-point Likert scale. Higher scores indicated higher career decision-making self-efficacy. The reliability in Lee & Lee's study (2000) was shown by a value of Cronbach's alpha of .91, and in this study, the score was .93.

Statistical Analysis

The collected data were analyzed using the IBM SPSS WIN 24.0 program.

- 1) The general characteristics were analyzed using descriptive statistics.
- 2) The degree of interpersonal competence, psychological well-being, and CDMSE were analyzed using mean and standard deviation.
- 3) The correlations between the interpersonal competence, psychological well-being, and

CDMSE were analyzed using Pearson's correlation coefficient.

- 4) Hierarchical multiple regression was conducted to examine the predictors of CDMSE. Model 1 included personal factors such as age, gender, life satisfaction, and personality. Interpersonal competence and psychological well-being were then entered into Model 2 as predictors of CDMSE. The statistical significance level was set at $\alpha = 0.05$.

Results and Discussion

The study subjects' general characteristics are summarized in Table 1. The age of the study subjects were: 20 years (34.2%), 21-23 years (45.7%), and 24 years and above (20.1%). Their average age was 21.9 (± 2.08) years. Males were 32.6% and the number of freshmen was the highest, with 80 students (43.5%). Most students answered that they didn't participate in religious activities (88.6%), they were satisfied with life (44.6%), and their personality was positive (63.6%). Their economic statuses were medium (76.1%) or low (19.0%). Their interpersonal relationship was good (64.7%) or average (33.2%).

CDMSE according to general characteristics was found to be different across age, gender, life satisfaction, and personality. Their CDMSE was found to be higher in students who were 24 years or above, male, satisfied with life, and had a positive personality. The results showed that among the general characteristics, age, life satisfaction, and personality influenced CDMSE. In other words, CDMSE was higher in positive nursing college students who were over 24 years and were satisfied with life. As a result of prior research on nursing students, satisfaction with the department and extroverted personality showed a high sense of CDMSE, which supported the results of this study (Kim et al., 2016).

Table 1. General Characteristics and difference of CDMSE according to General Characteristics (N=185)

| Variables | Category | n (%) or Mean \pm SD | CDMSE | t(p) |
|----------------------|----------------------------|-------------------------------|-----------------|-------------------------------|
| Age (yrs) | 20 ^a | 21.9 \pm 2.08 63 (34.2%) | 3.60 \pm 0.46 | 10.37 ($<.001$) a,b<c |
| | 21-23 ^b | 84 (45.7%) | 3.47 \pm 0.50 | |
| | ≥ 24 ^c | 37 (20.1%) | 3.91 \pm 0.52 | |
| Gender | Male | 60 (32.6%) | 3.74 \pm 0.57 | 2.30 (.023) |
| | Female | 124 (67.4%) | 3.54 \pm 0.48 | |
| Grade | Freshman | 80 (43.5%) | 3.63 \pm 0.45 | 0.91 (.436) |
| | Sophomore | 50 (27.2%) | 3.52 \pm 0.07 | |
| | Junior | 53 (28.8%) | 3.64 \pm 0.61 | |
| | Senior | 1 (0.5%) | 4.04 \pm 0.00 | |
| Religious activities | Yes | 21 (11.4%) | 3.65 \pm 0.51 | -0.20 (.845) |
| | No | 163 (88.6%) | 3.60 \pm 0.51 | |
| Life satisfaction | Not satisfied ^a | 34 (18.5%) | 3.46 \pm 0.50 | 15.60 ($<.001$) a,b<c |
| | Moderate ^b | 68 (37.0%) | 3.42 \pm 0.45 | |
| | Satisfied ^c | 82 (44.6%) | 3.83 \pm 0.49 | |

| | | | | |
|----------------------------|-----------------------|-------------|-----------|-----------------------|
| Personality | Positive ^a | 117 (63.6%) | 3.70±0.51 | 4.81 (.009) a>b |
| | Usually ^b | 55 (29.9%) | 3.46±0.49 | |
| | Negative ^c | 12 (6.5%) | 3.43±0.51 | |
| Economic status | High | 9 (4.9%) | 3.71±0.57 | 1.01 (.364) |
| | Medium | 140 (76.1%) | 3.58±0.50 | |
| | Low | 35 (19.0%) | 3.70±0.55 | |
| Interpersonal relationship | Good | 119 (64.7%) | 3.68±0.74 | 2.92 (.056) |
| | Usually | 61 (33.2%) | 3.48±0.51 | |
| | Poor | 4 (2.2%) | 3.67±0.50 | |

†CDMSE: Career Decision-Making Self-Efficacy

The mean scores for interpersonal competence (3.44 ± 0.55), psychological well-being (2.86 ± 0.33), and CDMSE (3.61 ± 0.52) are presented in Table 2.

Table 2. Degree of Interpersonal competence, Psychological well-being, and CDMSE (N=185)

| Variables | Mean | ± SD | Min | Max | Range |
|--------------------------|------|--------|------|------|-------|
| Interpersonal competence | 3.44 | ± 0.55 | 1.65 | 5.00 | 1-5 |
| Psychological well-being | 2.86 | ± 0.33 | 2.06 | 3.78 | 1-5 |
| CDMSE† | 3.61 | ± 0.52 | 2.40 | 5.00 | 1-5 |

†CDMSE: Career Decision-Making Self-Efficacy

The correlation (*r*)-values between interpersonal competence, psychological well-being, and CDMSE are shown in Table 3. CDMSE was positively correlated with interpersonal competence ($r = .55, p < .001$) and psychological well-being ($r = .54, p < .001$). Moreover, interpersonal well-being and psychological well-being were positively correlated ($r = .40, p < .001$).

Table 3. Correlation among Interpersonal competence, Psychological well-being, and CDMSE(N=185)

| Variables | 1 | 2 | 3 |
|-----------------------------|-----------------------|-----------------------|---|
| 1. Interpersonal competence | 1 | | |
| 2. Psychological well-being | .40 ($p < .001$) | 1 | |
| 3. CDMSE† | .55 ($p < .001$) | .54 ($p < .001$) | 1 |

†CDMSE: Career Decision-Making Self-Efficacy

The results of the hierarchical regression model for the CDMSE of nursing students are presented in Table 4. When personal factors, including demographic information, were entered into Model 1, and the regression equations were found to be significant ($F = 7.9, p < .001$). The explanatory power for CDMSE was 20.9%. Life satisfaction ($\beta = .58, p = .002$) was a significant predictors of CDMSE in this model. When interpersonal competence and psychological well-being were added in Model 2, the regression equations were still significant ($F = 18.3, p < .001$). Interpersonal competence ($\beta = .38, p < .001$) and psychological well-being ($\beta = .34, p < .001$) were significant variables in Model 2, accounting for 46.0% of the variance in the other variables.

As a result of comparing career maturity according to the grade for female nursing students, this

is contrary to the fact that there was no significant difference (Song, 2017). Due to the nature of the nursing department, the career path has already been determined compared to other departments and hence, it is assumed that the higher the age, the better the CDMSE that can give positive meaning to career decision-making and preparation behavior. Therefore, since the CDMSE of nursing students is related to the inner part of the subject, individualized strategies are needed according to the individual disposition of nursing students to come up with a plan to increase this.

It was found that there was a positive correlation between interpersonal relationship ability and psychological well-being. In previous studies, it was found that high psychological well-being had a positive effect on interpersonal relationship ability (Kwon, 2018), and low psychological well-being had a negative effect on interpersonal relations (Kim et al., 2014). Therefore, education on interpersonal relationship skills based on the psychological well-being of nursing students is necessary. Another factor influencing the CDMSE of nursing students was life satisfaction. In particular, for the group that was satisfied with life, it was found to be a significant influencing factor in CDMSE. Nursing students with a low understanding of their majors and career paths showed low satisfaction with their departments, and as a result, their level of satisfaction with their lives decreased (Kim et al., 2016). The results of this study suggest that the problems related to CDMSE of nursing students may be related to life satisfaction. Therefore, it is thought that intervention is needed to increase the life satisfaction of nursing students who are dissatisfied with their lives.

Interpersonal competency and psychological well-being were found to be significant influencing factors in the second stage, in which general characteristics were controlled and interpersonal relationship ability and psychological well-being were included. This is consistent with a previous study of pre-school teachers who reported that higher self-confidence in their career decisions resulted in higher their psychological well-being (Jang et al., 2020). Therefore, to find a way to enhance the CDMSE of nursing students, it is necessary to first understand the level of psychological well-being. Furthermore, a study on the influence of psychological factors is necessary. Also, there was a positive correlation between interpersonal competence and career maturity in a study of female students (Song, 2017), and a study of middle school students showed that interpersonal communication, that is, the more people talked about their careers, the more diverse people they interacted with. It was reported that the more conversations and frequent conversations, the higher the CDMSE (Thurman, 1971).

Table 4. Hierarchical Regression Models Examining the Association of CDMSE (N=185)

| Model | B | β | SE | t | p | Adj. R ² | F(p) |
|--------------------------|--|---------|------|-------|-------|---------------------|-------------------------|
| 1 | (Constant) | 3.61 | | .06 | 65.18 | <.001 | .209 7.9 (<.001) |
| | Age (ref: 20) | | | | | | |
| | 21-23 | -0.10 | -.50 | .08 | -1.36 | .177 | |
| | ≥ 24 | 0.21 | .41 | .11 | 1.95 | .053 | |
| | Gender(ref: male) | -0.07 | -.14 | .08 | -0.87 | .387 | |
| | Life satisfaction (ref: dissatisfaction) | | | | | | |
| | Moderate | -0.07 | -.13 | .10 | -0.71 | .480 | |
| | Satisfaction | 0.30 | .58 | .10 | 3.09 | .002 | |
| | Personality (ref: negative) | | | | | | |
| Usually | -0.07 | -.13 | .14 | -0.45 | .652 | | |
| Positive | 0.07 | .13 | .14 | 0.47 | .643 | | |
| 2 | (Constant) | 0.99 | | .31 | 3.22 | .002 | .460 18.3 (<.001) |
| | Age (ref: 20) | | | | | | |
| | 21-23 | -0.12 | -.22 | .06 | -1.81 | .072 | |
| | ≥ 24 | 0.16 | .32 | .09 | 1.81 | .071 | |
| | Gender(ref: male) | 0.03 | .06 | .07 | 0.46 | .649 | |
| | Life satisfaction (ref: dissatisfaction) | | | | | | |
| | Moderate | -0.13 | .26 | .08 | -1.62 | .107 | |
| | Satisfaction | 0.02 | .05 | .09 | 0.28 | .779 | |
| | Personality (ref: negative) | | | | | | |
| | Usually | -0.22 | -.42 | .12 | -1.78 | .078 | |
| | Positive | -0.20 | -.39 | .12 | -1.62 | .106 | |
| | Interpersonal competence | 0.35 | .38 | .06 | 6.10 | <.001 | |
| Psychological well-being | 0.52 | .34 | .10 | 4.98 | <.001 | | |

Conclusion

This study was designed to evaluate the impact of interpersonal competence and the psychological well-being of nursing students on CDMSE. The results showed that among the general characteristics, age, life satisfaction, and personality influenced CDMSE. In addition, in this study, CDMSE was found to have a positive correlation with interpersonal competence and psychological well-being. Also, interpersonal competence and psychological well-being were found to be influencing factors on CDMSE. Based on the results of this study, CDMSE of nursing students is related to interpersonal competence, and to improve career decision self-efficacy, it is necessary to develop a program that considers the factors of interpersonal competence.

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