

The Effects of Psychological Well-Being and Academic Efficacy on the Self-Leadership of Nursing Students

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Abstract

This study aimed to investigate how nursing students' psychological well-being and academic self-efficacy affect self-leadership. This descriptive study collected data through a structured questionnaire for first-year students at a nursing college in Korea. Descriptive statistics and Pearson correlation were used to analyze the data. The scores for psychological well-being, academic self-efficacy, and self-leadership were 3.25, 3.00, and 3.43, respectively. The psychological well-being and self-leadership ($r=.088$, $p<.001$), academic self-efficacy and self-leadership ($r=.105$, $p<.001$), and psychological well-being and academic self-efficacy ($r=.142$, $p<.001$) all showed significant correlations. We expect this study to be used as primary data for developing curriculums and programs to foster professional nurses by enhancing the self-leadership of nursing students, which affects their self-competence and motivation.

Keywords: *Nursing students, Psychological well-being, Academic efficacy, Self-leadership*

1. Introduction

1.1. Background

Nursing students concentrate on their college life to pass the national exam and become professional nurses by learning theories and skills to develop competency according to their corresponding curriculums [1].

However, while adjusting to university life, nursing students are exposed to various stressful situations such as excessive academic burden, interpersonal relationships with peers, exams, and employment. In addition to acquiring professional knowledge about majors, they experience social roles much too early due to clinical practice, which is an obstacle in adjusting to college life [2]. Nursing students are also exposed to a variety of stresses, such as difficulties in applying theoretical nursing knowledge to clinical practice while adjusting to unfamiliar clinical settings, role ambiguity, heavy workloads, helplessness, lack of ability, uncertainty, emotional distress in interpersonal relationships with patients and family members, lack of control in unexpected situations, and difficulties in forming relationships with advisors and colleagues.

Nursing students value self-leadership as a concept to adjust to university life, overcome problems, and develop capabilities to cope with clinical settings. Self-leadership is a process

Article History:

Received (November 13, 2019), Review Result (December 20, 2019), Accepted (January 25, 2020)

of exerting the influence necessary to perform tasks. It is presented as a core competency that should be formed during university life to develop self-management and internal motivation that emphasizes autonomy and responsibility for setting goals and self-control [3]. Previous studies have reported that greater self-leadership increases autonomy and passion [4] and that higher academic major satisfaction has positive effects on the progress toward achieving goals and helps improve nursing capabilities [5].

According to a prior study on nursing students, self-leadership was found to be correlated with psychological well-being [6] and academic self-efficacy [7]. Ryff considered the key elements of psychological well-being to be the six factors of self-acceptance, personal growth, purpose in life, positive relations with others, environmental mastery, and autonomy. She reported that a high level of psychological well-being would lead individuals to continuously explore positive attitudes, potential, and talents, find meaning and goals in their experiences, handle the environment to fit their relationships and desires and act on their beliefs [8]. Meanwhile, academic self-efficacy refers to learners' judgment about their ability to organize and implement the actions required to perform tasks related to their learning situation [9]. It significantly impacts performance or goal setting [10]. Academic self-efficacy is deeply related to self-management for achieving one's task or the self-leadership of the self-control system. Namely, it is a cognitive system that tries to successfully perform given learning tasks according to one's expectations or goals [11]. Nursing professionals also require self-leadership that emphasizes creativity and imagination to improve their work performance and enhance organizational effectiveness as they adapt to new changes [12]. Self-leadership has also been identified among students as essential in adapting to nursing college, but studies verifying its effects need to be more comprehensive [13]. Therefore, we must cultivate leadership in nursing colleges' curriculums to develop core competencies required in clinical settings and for students to grow into professional nurses [14].

Therefore, this study analyzed the factors that influence self-leadership to grow into a professional nurse by raising self-leadership and internal motivation and preparing primary data for curriculum and program development to improve it.

1.2. Purpose

This study aims to examine the effects of psychological well-being and academic self-efficacy on the self-leadership of nursing students. The details are as follows.

- * Identify the general characteristics.
- * Identify the degree of psychological well-being, academic self-efficacy, and self-leadership.
- * Identify the correlation between psychological well-being, academic self-efficacy, and self-leadership.

2. Method

2.1. Design

This descriptive study examines the degree of psychological well-being, academic self-efficacy, and self-leadership of nursing students and identifies the factors influencing self-leadership.

2.2. Participants

The participants of this study were nursing students attending a nursing college in Korea, and we collected data through a survey. Since the variables may vary depending on the academic year, this study was performed on first-year students before they began their major studies and clinical practice. A total of 203 data points, excluding insufficient responses, were used for the final analysis among 210 students who understood the purpose of this study and agreed to participate in the survey. The G*Power 3.1 program was used to confirm the adequacy of the sample size. Regarding regression analysis, the minimum number of samples required was calculated to be 162 for a moderate effect of .15, a significance level of 5%, a power of 90%, and 13 predictors. This study satisfied the analysis conditions.

2.3. Research tools

2.3.1. Psychological Well-being

For psychological well-being, we used a modified and revised Korean version of the Psychological Well-Being (PWB) Scale by Kim et al. [15], which was initially developed by Ryff et al. (1995). On a 5-point Likert scale, higher scores indicate higher psychological well-being. The tool's reliability was Cronbach's $\alpha=.90$ at the time of development and Cronbach's $\alpha=.92$ in this study.

2.3.2. Academic self-efficacy

For academic self-efficacy, we used the tool developed by Kim and Park [9]. On a 5-point Likert scale, higher scores indicate higher academic self-efficacy. In terms of reliability, Cronbach's α was .74 for confidence, .76 for self-regulated efficacy, and .84 for task difficulty in the study by Kim and Park [9]. In this study, Cronbach's α was .81 for confidence, .81 for self-regulated efficacy, .74 for task difficulty, and the overall Cronbach's α was .84.

2.3.3. Self-leadership

For self-leadership, we used the tool revised and modified by Shin [16] based on the Revised Self-Leadership Questionnaire (RSLQ) initially developed by Houghton and Neck (2002). On a 5-point Likert scale, higher scores indicate higher self-leadership. The tool's reliability was Cronbach's $\alpha=.87$ in the study by Shin [16] and Cronbach's $\alpha=.92$ in this study.

2.4. Data analysis method

We used SPSS WIN 22.0 to analyze the collected data in this study. We obtained the frequency and percentage for general characteristics and the mean and standard deviation for psychological well-being, academic self-efficacy, and self-leadership. Pearson's correlation coefficients analyzed the relationship between psychological well-being, academic self-efficacy, and self-leadership.

3. Results

3.1. General characteristics

[Table 1] shows the general characteristics of this study. Regarding age, 58.6% of the participants were under 20 years old, 29.6% were 21~25 years old, 6.4% were over 31 years

old, and 5.4% were 26~30 years old. Of the participants, 27.1% were men and 72.9% were women. Regarding religion, 41.4% of the participants were religious, while 58.6% had no religion, and 10.3%, 73.9%, and 15.8% considered their economic status low, average, and high, respectively. Regarding residence status, 38.9% lived alone, 34.5% lived with their parents, 17.7% lived in a dormitory, and 8.9% lived in other residences. The level of satisfaction with friendship was in the order of high (39.9%), average (34.5%), very high (17.2%), low (6.4%), and very low (2.0%). As for involvement in club activities, 30.5% answered yes, and 69.5% answered no; 12.3% of the participants had leadership experience, and 87.7% had no leadership experience. Regarding assessing their leadership competency, 61.1% answered average, 21.7% low, 9.9% high, and 3.9% very low. The level of satisfaction with college life was in the order of average (49.8%), high (22.7%), low (18.2%), very low (5.9%), and very high (3.4%).

Table 1. General characteristics of subjects. (N=203)

Variable	Categories	n	%	누적 퍼센트
Age	Under 20	119	58.6	58.6
	21~25	60	29.6	88.2
	26~30	11	5.4	93.6
	Over 31	13	6.4	100.0
Gender	Male	55	27.1	27.1
	Female	148	72.9	100.0
Religion	Yes	84	41.4	41.4
	No	119	58.6	100.0
Economic Status	Low	21	10.3	10.3
	Middle	150	73.9	84.2
	High	32	15.8	100.0
Residence Status	Parents	70	34.5	34.5
	Dormitory	36	17.7	52.2
	Live alone	79	38.9	91.1
	etcetera	18	8.9	100.0
Satisfaction of friendship	Very Low	4	2.0	2.0
	Low	13	6.4	8.4
	Middle	70	34.5	42.9
	High	81	39.9	82.8
	Very High	35	17.2	100.0
Group activity	Yes	62	30.5	30.5
	No	141	69.5	100.0
Leadership experiences	Yes	25	12.3	12.3
	No	178	87.7	100.0
Leadership competency	Very Low	8	3.9	3.9
	Low	44	21.7	25.6
	Middle	124	61.1	86.7
	High	20	9.9	96.6

	Very High	7	3.4	100.0
Satisfaction with College life	Very Low	12	5.9	5.9
	Low	37	18.2	24.1
	Middle	101	49.8	73.9
	High	46	22.7	96.6
	Very High	7	3.4	100.0

3.2. Degree of psychological well-being, academic self-efficacy, and self-leadership

[Table 2] shows the degree of the participants' psychological well-being, academic self-efficacy, and self-leadership. The psychological well-being, academic self-efficacy, and self-leadership scores were 3.25 ± 0.47 , 3.00 ± 0.47 , and 3.43 ± 0.51 , respectively.

Table 2. Degree of psychological well-being, academic self-efficiency, and self-leadership. (N=203)

	M±SD	Min	Max	Range
Psychological well-being	3.25 ± 0.47	1.98	4.8	1~5
Academic self-efficacy	3.00 ± 0.47	1.82	4.71	1~5
Self-leadership	3.43 ± 0.51	1.71	5	1~5

3.3. Correlation between the psychological well-being, academic self-efficacy, and self-leadership

[Table 3] shows the correlation between the participants' psychological well-being, academic self-efficacy, and self-leadership. The psychological well-being and self-leadership ($r=.088$, $p<.001$), academic self-efficacy and self-leadership ($r=.105$, $p<.001$), and psychological well-being and academic self-efficacy ($r=.142$, $p<.001$) all showed significant correlations.

Table 3. Correlations among psychological well-being, academic self-efficiency, and self-leadership (N=203)

Variable	Psychological well-being	Academic self-efficacy	Self-Leadership
Psychological well-being	1	-	-
Academic self-efficacy	.142 ($p<.001$)	1	-
Self-leadership	.088 ($p<.001$)	.105 ($p<.001$)	1

4. Discussion

This study aimed to examine nursing students' psychological well-being, academic self-efficacy, and self-leadership and identify the effects on self-leadership to prepare primary data to develop curriculums and programs to enhance self-leadership.

The mean score for self-leadership of the nursing students in this study was 3.43, higher than the median. This is lower than the score of 3.72 from a study on second and third-year students in 3-year colleges and third- and fourth-year students in 4-year colleges who experience at least one semester of clinical practice [17]. It is also lower than the score of

3.70 from a study on third-year students in 3-year colleges and fourth-year students in 4-year colleges [18]. The mean score for psychological well-being was 3.26, higher than the median. This is higher than the score of 149.6 (range: 46~276, 2.72 when converted to a 5-point scale) from a study on all grades of nursing students using a 6-point Likert scale with the same tool [6] and higher than the score of 3.33 for first-year students (2.78 when converted to a 5-point scale) from a study on general university students [19].

The mean score for academic self-efficacy was 3.00, which is higher than the median. This is similar to the score of 3.09 from a prior study on first- and fourth-year nursing students using the same tool [20] but lower than the score of 3.81 from the study by Han on first-year nursing students [10].

There was a positive correlation between psychological well-being and self-leadership ($r=.088$, $p<.001$), and the most influential factor on the self-leadership of nursing students was psychological well-being ($\beta=.25$, $p<=.005$). This is similar to the results of prior studies [21][22][23] on the relationship between psychological well-being and self-leadership. This shows that people with specific growth and life purposes, who want to overcome new challenges and difficulties, are motivated to lead a positive life [23]. Students' psychological well-being includes the quality of their lives, their satisfaction and happiness with school life, and how well they function as members of the school [21]. A positive correlation was found between self-leadership and academic self-efficacy ($r=.105$, $p<.001$). This is consistent with prior studies on nursing students [23][24]. A study by Lee also suggested that college students with high academic self-efficacy were firm in their beliefs and wanted to achieve more [25]. Academic self-efficacy is deeply related to self-management for attaining one's task or the self-leadership of the self-control system because it is a cognitive system that tries to successfully perform the given learning task according to one's expectations or goals [11]. This can be viewed as the process in which nursing students set their own goals, motivate themselves, and strive to achieve results. Guidance will be required to enhance this process [7].

The results of this study confirm that the psychological well-being of nursing students is a factor that affects their academic performance. Interventions will be required to enhance self-leadership.

5. Conclusion

This study aimed to examine the effects of psychological well-being and academic self-efficacy on nursing students' self-leadership and prepare primary data to develop curriculums and programs to enhance self-leadership. The participants' psychological well-being, academic self-efficacy, and self-leadership were above average, and there was a significant correlation between psychological well-being, academic self-efficacy, and self-leadership.

Based on the results of this study, we propose the following.

First, it is necessary to develop curriculums and programs that can enhance psychological well-being and self-leadership by considering the characteristics of nursing students and verifying the effectiveness of the improved curriculums and programs.

Second, follow-up studies will be required because there is a lack of research on verifying the relationship between psychological well-being, academic self-efficacy, and self-leadership of nursing students.

Third, as this study was limited to nursing students at one university, additional studies must be carried out by expanding the regional scope and participants to generalize the results.

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