

The effects of laughter programs on nursing students' laughter index, self-esteem, and career decision making self-efficacy

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Abstract: The purpose of this study was to conduct a laughter program for third-year nursing students who completed the first semester of hospital practice, to investigate the effects of the laughter program on nursing students' laughter index, self-esteem, and career decision making self-efficacy, and to identify the relationship between laughter index, self-esteem, and career decision making self-efficacy. Data from a total of 29 subjects who experienced the laughter program (intervention time: 2 sessions for 60 minutes, number of applications: once a week, a total of 6 times over 3 weeks) were analyzed (paired t-test, Pearson correlation coefficient). Laughter programs were confirmed to have a significant impact on laughter index, self-esteem, and career decision making self-efficacy, and laughter index had a statistically significant positive correlation with career decision making self-efficacy. Therefore, if the laughter program is utilized, the positive self-management can be induced by increasing interest and motivation for studying and employment, and it can guide the students to resolve negative emotions such as psychological tension caused by excessive study load, stress due to hospital practice, and burden of employment.

Keywords: Career decision making self-efficacy, Laughter index, Laughter program, Self-esteem.

1. Introduction

Laughter therapy is very difficult to define in a nutshell, but according to the American Laughter Therapy Association's definition, laughter therapy refers to any intervention that promotes health and well-being by stimulating interesting discoveries and expressions of absurdity or contradictions in everyday life and is used as a complementary therapy to help physical, emotional, cognitive, and social healing and overcoming [1]. Laughter therapy is a process of positive self-expression through laughter and is about positively changing the negative self [2]. Robinson (1978) first proposed laughter therapy as a nursing intervention using the term laughter nursing, and laughter therapy was used as one of the complementary and alternative therapies in various nursing settings at home and abroad [3]. In 2009, the Korean Laughter Clinical Society centered on medical personnel was launched for the first time in Korea. Laughter therapy uses laughter programs a lot because, compared to other intervention methods, they have the advantage of not requiring special preparation, not costing a lot of money, being able to be used regardless of time and place, and being able to be used with only a little training [2]. The laughter index is calculated as a score based on your happy thoughts and how well you laugh, and if you are trained through a laughter program, the score will increase.

In research on self-esteem, the process of confirming the relationship with various variables related to psychology at various levels has been extensively conducted, and as a result, positive and negative functions for self-esteem have been presented. According to its argument, subjects with lower self-esteem had higher levels of anger and hostility, and low self-esteem led to aggressive behavior [4]. In addition, self-esteem is one of the ways to help the process of changing from a nursing student to a nurse, and it can be said that people with high self-esteem achieve more because of not only being good at solving problems critically, getting out crises rationally, believing in themselves, and taking care of themselves,

but also communicating with themselves and others in a healthy and effective way and feeling secure about themselves [5].

It can be seen that nursing students enter the world of work with a lack of deep concerns about their career preparation, as their profession as a nurse is predetermined at the same time upon entering the Department of Nursing. Research has shown that, like nursing students, the more they believe their career path has been determined from the beginning, the more stressed they feel about employment. Therefore, to ensure successful employment and adaptation to various fields after graduation, it is necessary to provide nursing students with specific career education and counseling during their college years and to strengthen their career preparation behaviors [6]. There is career decision making self-efficacy, which refers to belief in one's abilities related to a career, and it refers to confidence in one's own behaviors consisting of goal selection, job information, problem solving, and future planning.

It is difficult to find research applied for the purpose of reducing the academic and employment stress of third-year nursing students who completed the first semester of clinical practice applying the laughter program, which was found to have positive physical and psychological effects in previous studies targeting elderly people [1, 7], cancer patients [8], and children [4], and it is thought that carrying out a laughter program and measuring its effectiveness are considered a very meaningful attempt. Therefore, this study aims to determine its effects on laughter index, self-esteem, and career decision making self-efficacy by applying a laughter program to third-year nursing students who completed the first semester of clinical practice.

1.1. Subject of the Study & Research Design

The purpose of this study is to conduct a laughter program for third-year nursing students who completed the first semester of clinical practice and to determine the effects of the laughter program on nursing students' laughter index, self-esteem, and career decision making self-efficacy. As one group pre test-post test design, this study measured general characteristics, laughter index, self-esteem, and career decision making self-efficacy before applying the laughter program to the research subjects, and after the experimental treatment, laughter index, self-esteem, and career decision making self-efficacy were measured repeatedly.

Among third-year nursing students who completed the first semester of clinical practice at K University in W City, Region G, 30 students who showed interest in the laughter program were selected as subjects for this study. At the beginning of the study, there were 30 participants, but since 1 person did not attend during the experiment, the total number of study subjects was 29. The data collection period for this study was from October to November 2021:

Laughter has a positive psychological effect by calming the mind down and relieving tension, and the laughter program provides laughter, clapping, and dancing and uses them therapeutically to use humor techniques and induce laughter, smiles, and joyful emotions [9]. In this study, the laughter program was conducted with the content appropriate and effective for stress management by a researcher qualified as hospital laughter coordinator (level 1) and laughter health instructor (level 1), after receiving advice from two laughter therapy experts. The intervention time was 2 sessions of 60 minutes, the number of applications was once a week, a total of 6 times over 3 weeks, and the laughter program consisted of structured contents of introduction, development, and conclusion stages each time. The total time provided to the subjects was 6 hours, and the details of the program are as follows: Laughter Communication, Effects and Side Effects of Laughter, Examples of Clinical Laughter Therapy in Korea, Nonverbal Communication Method, etc.

1.2. Tool of the Study

The Laughter index is a type of communication that causes laughter, smiles, and pleasant emotions and enables interaction, and in this study, the Laughter Index tool [10] developed in 2002, as amended [11] in 2015 was used. It is a 5-point scale consisting of "very true (5 points)" to "not at all true (1 point)" with a total of 30 questions (15 questions for laughter about oneself, 15 questions for laughter about

others). Cronbach's α for this tool was .949 (Cronbach's α for laughter about oneself = .894, Cronbach's α = .907 for laughter about others).

The self-esteem scale is Rosenberg's (1965) self-esteem scale [12], translated into Korean in 1974 [13], and has a total of 10 questions (5 positive and 5 negative). It is a 4-point scale consisting of 'very true (4 points)' to 'not at all true (1 point)' and ranges from 10 to 40 points, with higher scores indicating higher self-esteem. An overall score of 10 to 19 indicates a low level of self-esteem, a score of 20 to 29 a normal level of self-esteem, and a score of 30 or more healthy and desirable self-esteem. Cronbach's α for the reliability of this tool was .758 (Cronbach's α for positive self-esteem = .762, Cronbach's α for negative self-esteem = .818).

To measure the career decision making self-efficacy, an adapted and validated version [14] of CDMSES-SF (Career Decision-making Self-efficacy Scale Short Form), a short form of the Career Decision-making Self-efficacy Scale (CDMSES) [15] developed in 1983 was used. This scale is a 5-point scale composed of "very true (5 points)" to "not at all true (1 point)" with a total of 25 questions including 11 questions on goal selection, 6 questions on job information, 3 questions on problem solving, and 5 questions on future planning. Cronbach's α for the reliability of this tool was shown to be .905 for goal selection, .836 for job information, .853 for problem solving, and .795 for future planning, respectively, with an overall Cronbach's α of .946.

1.3. Data Analysis

The collected data for this study were analyzed using the SPSS (Statistical Package for the Social Science) WIN 25.0 program. Frequencies and percentages were calculated to examine the general characteristics of the study subjects. In order to determine the effect of the laughter program on nursing students' laughter index, self-esteem, and career decision making self-efficacy, a paired t-test was conducted as a hypothesis test. After implementing the laughter program, we conducted an analysis using Pearson correlation coefficient to determine the relationship between nursing students' laughter index, self-esteem, and career decision making self-efficacy.

2. Results and Discussion

2.1. General Characteristics of Study Respondents

The subjects included 14 male (48.3%) and 25 female (51.7%), with an average age of 22.62 years. Satisfaction with the major was 7.72 out of 10.

2.2. Laughter Index, Self-Esteem, and Career Decision Making Self-Efficacy Before and After Laughter Program

The laughter program showed statistically significant effects on laughter index ($t=6.17$, $p<.001$), self-esteem ($t=6.20$, $p<.001$), and career decision making self-efficacy ($t=4.89$, $p<.001$). Additionally, each detailed item also showed significant differences (Table 1).

Table 1.

Laughter index, self-esteem, and career decision making self-efficacy before and after laughter program.

Variable		Pre-test	Post-test	t	p
		M \pm SD	M \pm SD		
Laughter index	Total	106.59 \pm 15.89	125.90 \pm 16.27	6.17	<.001
	Laughter index for oneself	52.45 \pm 8.96	63.21 \pm 8.23	6.43	<.001
	Laughter index for others	54.14 \pm 7.83	62.69 \pm 8.35	5.32	<.001
Self-esteem	Total	23.90 \pm 2.47	28.86 \pm 4.28	6.20	<.001
	Positive	15.59 \pm 2.65	17.21 \pm 2.41	4.60	<.001
	Negative	8.31 \pm 2.47	11.66 \pm 3.89	4.52	<.001
	Total	3.78 \pm 0.49	4.24 \pm 0.47	4.89	<.001
	Goal selection	3.88 \pm 0.52	4.26 \pm 0.49	3.94	<.001

Career decision making self-efficacy	Career information	3.63±0.59	4.25±0.54	5.51	<.001
	Problem solving	3.64±0.61	4.18±0.55	4.55	<.001
	Future planning	3.85±0.54	4.23±0.47	3.50	0.002

2.3. Correlations among Laughter Index, Self-Esteem, and Career Decision Making Self-Efficacy

As a result of analyzing the relationship between nursing students' laughter index, self-esteem, and career decision making self-efficacy after applying the laughter program, laughter index showed a statistically significant positive correlation with career decision self-efficacy ($r=.75, p<.001$), there was no statistically significant correlation with self-esteem (Table 2). There was also no statistically significant correlation between self-esteem and career decision making self-efficacy.

Based on the above results, it can be seen that the higher the laughter index, the higher the career decision making self-efficacy.

Table 2.

Correlations among laughter index, self-esteem, and career decision making self-efficacy.

Variables	Laughter index	Self-esteem	Career decision making self-efficacy
	r(p)		
Laughter index	1		
Self-esteem	0.21(.280)	1	
Career decision making self-efficacy	0.75(<.001)	0.36(0.052)	1

Third-year nursing students complain of psychological tension and burden due to the rigorous curriculum, heavy study load, stress related to hospital practice, and the burden of employment, and are on the verge of losing their laughter as a result. Therefore, this study aims to confirm its effects on laughter index, self-esteem, and career decision making self-efficacy by applying a laughter program to third-year nursing students, and to identify the relationship between laughter index, self-esteem, and career decision making self-efficacy.

A laughter index of 0 to 60 (poor) means a serious situation requiring laughter therapy; 61 to 90 points (worse than fair), a situation in which the basic thoughts and values are positive but the facial expression is negative and the person does not laugh often; 91 to 120 points (better than fair), a state in which, with just a little more effort, one becomes proficient in not only one's own laughter but also the laughter that communicates with others; and 121 to 150 points (good) means that one has a positive mindset in everything, so laughing is natural and part of one's daily life, and one feels happy even in small things and can make others happy with laughter [10]. The laughter index of third-year nursing students increased from 106 points in the pre-measurement to 125 points after applying the laughter program, leading to a statistically significant increase of 19 points on average. The pre-laughter index appears to be better than fair, meaning that, although their thoughts are positive, they are people who are bad at overcoming negative situations with laughter, so I think it is necessary for them to apply a laughter program and make it a habit because nursing students need habits that can cause spontaneous laughter when they are in a negative situation.

The self-esteem score also significantly increased by an average of 4.96 points, from 23.90 in the pre-measurement to 28.86 in the post-measurement. This is in line with the results of the prior study [16], which investigated the effects of the laughter program on clinical practice stress in nursing students, the prior study [17], which analyzed the effects of the laughter training program on nurses' self-esteem, and the study conducted on a laughter program targeting adult men and women [11]. However, it failed to raise a normal level of prior self-esteem to a high level of self-esteem of 30 points or more. Self-esteem is the value and judgment that individuals have about themselves and is an important factor that affects human behavior, social adaptation, and desirable personality formation, and since it has a positive impact

on the health of nursing students and the nursing perspectives and nursing professionalism of nursing care recipients, it is expected to contribute to helping nursing students solve various nursing problems fundamentally and holistically.

There was a statistically significant difference between career decision making self-efficacy of 3.78 before applying the laugh program and career decision making self-efficacy of 4.24 after its application. It is difficult to compare because there is no previous study that has proven the effect of the laughter program on career decision making self-efficacy, but it was consistent with the results of previous study [17] that analyzed the effect of the laughter training program on nursing students' goal commitment. Goal commitment includes efforts put in to achieve career goals and the competence to believe that career goals can be achieved. Previous studies [18,19] showing that group art therapy for college students had a positive effect on improving their career decision making self-efficacy and problem-solving abilities are in line with the results of this study.

As a result of analyzing the relationship between laughter index, self-esteem, and career decision making self-efficacy of nursing students after applying the laughter program, laughter index had a statistically significant positive correlation with career decision making self-efficacy. It is also a result consistent with other previous studies [16, 17, 20-22]. Looking at these results, the laughter index improved through the laughter program, and the higher the laughter index, the higher the career decision making self-efficacy, so it can be seen that the program is also effective in increasing the laughter index and career decision making self-efficacy.

Summarizing the results of the study, it has been shown that the laughter program for third-year nursing students is effective in promoting laughter index, self-esteem, and career decision making self-efficacy. Therefore, it is necessary to use a laughter program to increase the laughter index, increase interest and motivation for studying and employment, and encourage positive self-management and resolution of negative emotions to achieve what they want.

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