

Effects of Collage-oriented Group Art Therapy on the Self-determination and Quality of Life of University Students with Disabilities

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Abstract

Introduction: Not only is the university student period an early stage for students with disabilities to make decisions about their future and begin their adult life, but the improvement of self-determination for successful adaptation to adult life in this period is considered a very important factor in the successful transition to adulthood and improvement of quality of life for students with disabilities.

Objectives: The purpose of this study is to find out how collage-oriented group art therapy affects self-determination and quality of life of university students with disabilities.

Methods: The subjects of the study were five university students with disabilities attending B University in area A. Group art therapy was conducted one to two times a week from June to July 2025, at 90 minutes per session for a total of 10 sessions.

Tools and Techniques: To verify the effectiveness of the study, self-determination and quality of life tests were conducted before and after collage-oriented group art therapy to determine any changes, and the test results were analyzed using the Wilcoxon signed-rank test, a nonparametric analysis.

Results: As a result of the study, first, it was found that collage-oriented group art therapy is statistically significant changes in the overall score of the self-determination scale and the entire sub-area. Second, the physical, psychological, social, and environmental areas among the sub-areas of the quality of life scale were significantly improved as a result of performing collage-oriented group art therapy.

Conclusion: These results suggest that collage-oriented group art therapy can be usefully used as an effective intervention method to improve self-determination and quality of life for university students with disabilities.

Keywords: Collage-oriented Group Art Therapy, University Students with Disabilities, Self-determination, Quality of Life

1. Introduction

Life involves a series of choices. Based on our values, desires, and wishes, we generally choose the most important or necessary. It is a human right to decide on one's own issues in everyday life and in life as a whole, which is an absolute right that applies equally to everyone, rather than a relative right based on a particular object or situation (Lee, Je & Lee, 2018).

Individuals with disabilities are educated in an integrated environment and begin to live independently in the community. They must defend themselves and express their opinions (Kim, 2014). At this time, self-determination becomes a vital factor in promoting the independence and autonomy of people with disabilities (Lee & Wehmeyer, 2004). It has a decisive impact on the quality of life of students with disabilities and their successful transition to adulthood (Wehmeyer, Agran & Hughes, 1998; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997).

According to Wehmeyer (2005), self-determination is the ability to make choices related to one's quality of life without undue external interference and is the primary causative agent of one's life. Field and Hoffman (1995) defined self-determination as an individual's ability to set and achieve goals based on knowledge, skills, self-respect, and environmental conditions. Although each researcher presents a different definition of self-determination, there is no disagreement that it ultimately aims to improve the quality of life. In particular, as the self-determination of students with disabilities is recognized as a crucial factor influencing their quality of life (Wehmeyer & Palmer, 2003; Wehmeyer & Schalock, 2001), research on this topic is being actively conducted.

According to previous studies, a correlation between self-determination and quality of life was examined in 145 students with disabilities who graduated from university. It was confirmed that there was a positive effect (Chao, 2017). A study evaluating the relationship between self-determination and quality of life in individuals with intellectual disabilities in Canada, the United States, Belgium, and France confirmed that the higher the self-determination, the higher the quality of life (Lachapelle, Haelewyck, Courbois & Verdugo, 2005). Research has shown that there is a positive correlation between self-determination skills and the quality of life of college students with autosomal spectrum disorder (Lubin, 2020), and that there is a positive correlation between the improvement of self-determination and the quality of life of individuals with developmental disabilities (Cho & Kahng, 2023; Jung & Kim, 2019; Kim, Lee & Kim, 2024). However, most of

these studies targeted individuals with developmental disabilities, and the majority were correlation, mediating variable, and path analysis studies. Therefore, it is necessary to develop intervention methods that can help improve the self-determination and quality of life of university students with disabilities.

Recent intervention methods to improve the self-determination and quality of life of persons with disabilities include art therapy. Through diverse media, art therapy enables individuals to experience failure, correction, and success in a virtual workspace while creating tangible visual goals in the form of artworks (Son & Shin, 2018). Such outcomes stimulate “visual thinking” (Arnheim, 1969), and the “Act” of observing one’s own creations provides an alternative mode of knowing (Allen, 1995), thereby fostering self-exploration, self-awareness, and recognition of self-worth.

In particular, college art therapy involves completing a work by drawing or tearing a favorite picture or letter from a magazine, making it easy to create a complete result by consciously and unconsciously projecting one’s image onto existing images or objects and simply selecting them. These realistic and simple college materials are particularly effective in clarifying the ambiguous interests and internal desires of the creator of the work (Lee & Aoki, 2010). Furthermore, collage art therapy is similar to self-determination, in which you go through a series of processes in which you choose an image that matches your current thoughts in a magazine, place an even piece on a piece of paper, select a piece to attach, complete the work, and check and evaluate the results.

Therefore, this study aimed to empirically examine how college-oriented group art therapy affects the self-determination and quality of life of university students with disabilities. Through this, effective mediation measures for the psychological growth and social independence of university students with disabilities were identified, and basic data were collected for the development of support programs for students with disabilities within the university field.

2. Research Methodology

2.1 Subjects of Study

This study was conducted among students with disabilities attending B University in A City, Republic of Korea. The participants comprised five students with disabilities who provided informed consent after being briefed on the study’s purpose and procedures. All participants demonstrated adequate eye–hand coordination to engage in the art therapy activities. The group art therapy program was conducted once or twice a week for 10 sessions for 90 min between June and July 2025. The participants’ characteristics are presented in Table 1.

[Table 1] General Information of the Participants

Subject of study	Age (Gender)	Grade	Disability	General characteristic
A	20 (Male)	2	Brain lesion disorder	Walking with a walker due to a disability. Frequently forgets what one has to do, prioritizes others' work over one's own, and agrees with others when making decisions
B	22 (Male)	2	Physical disability	Walking with a cane due to a disability. He has a complex in his appearance and is stressed out in social relationships. Difficulty in making decisions about one's future
C	21 (Female)	3	Brain lesion disorder	Due to the disability, she underwent surgery several times due to difficulties in walking during her childhood, and now she walks without an assistive device, but her walking is unnatural due to the difference in the size of her feet. She has difficulty expressing herself and follows her mother's decision when making a decision
D	20 (Female)	2	Physical disability	He walks without assistive devices, but his walking is unnatural due to his disability. Since childhood, he has difficulty in social relations and self-expression due to his hospital life due to disability, and he does not know what to do when making decisions
E	25 (Female)	3	Brain lesion disorder	Having hemiplegia due to disability. The social relationship is good, but he is depressed because he thinks his recent job frustration is due to his disability. Difficulty in making decisions about one's future

2.2 Research Tool

2.2.1 Student Self-Determination Scale

The student self-determination scale used in this study was adapted by Park (2003) to the Self-Determination Student Scale (SDSS) co-produced by Field, Hoffman, and Sawilowsky (2000). The self-determination scale comprises 92 questions and is divided into five sub-factors: know yourself, value yourself, plan, act, experience outcomes and lean. The test method required the participants to indicate “yes” or “no” directly for each question. The overall reliability coefficient (Cronbach’s α) in this study was .879.

2.2.2 Quality of Life Scale

The quality of life scale used in this study was the Korean version of the quality of life scale adapted by Min et al. (2002) from the WHO-produced quality of life scale (WHOQOL-BREF). The Korean version of the Quality of Life Scale comprises 26 questions and six sub-factors: overall quality of life, general health awareness, physical health, psychological health, social relationships, and environmental health. Each item of the WHOQOL-BREF is scored on a response scale ranging from 1 to 5, which is stipulated as a five-point ordinal scale. In this study, the overall reliability coefficient (Cronbach’s α) was .926.

2.3 Research Procedures

This study examined the impact of a college-oriented group art therapy program on the self-determination and quality of life of university students with disabilities. To this end, five students with disabilities were selected as the final subjects of the study, and they were informed of the program’s purpose and implementation method for students with disabilities attending University A. The selected students participated in 10 sessions of collage-oriented group art therapy, each lasting 90 min and held once or twice per week between June and July 2025. To evaluate the effectiveness of the program, self-determination and quality of life assessments were administered before and after the intervention.

2.4 Collage-Oriented Group Art Therapy Program

2.4.1 Program Configuration

The art therapy program conducted in this study is based on Field and Hoffman’s (1995) self-determination program. Through several studies, Field and Hoffman (1995) confirmed that their model can be applied to individuals with transitional disabilities. Furthermore, the self-determination program based on this model can be widely used for students with intellectual disabilities and for students with behavioral disabilities without intellectual disabilities. Additionally, its training effect is known to be positive.

Examining the composition of the group art therapy program, the first and second sessions fell within the ‘Know Yourself’ stage, focusing on self-introduction and self-view. The 3rd and 4th sessions were part of the “Value Yourself” stage, focusing on what is important to me and my dreams. In the 5th and 6th sessions, they developed plans to achieve their dreams in the planning stage, and in the 7th and 8th sessions, they explored how to utilize their resources to execute these goals. In the final 9th and 10th sessions, we had time to find out the circumstances in which we had to insist on our decisions and how to assert ourselves effectively as a stage of evaluating the results, and to look back on the program and make a commitment to what we should do to achieve our own decisions.

The program allowed group members to freely express their experiences and emotions, focusing on improving self-determination and quality of life by allowing natural dynamics between group members to emerge through the results of activities conducted in each session. Table 2 shows the composition of the collage-oriented group art therapy program by session.

[Table 2] Program Details

Phase	Session	Subject	Goal	Content and Method
Know Yourself	1	self-introduction	- Awareness of program objectives - An understanding of oneself and others - Forming intimacy among group members	Introduce yourself with a collage of magazine pictures
	2	Self-view	- Self-awareness - Recognize my characteristics as a strength	Express what I'm good at and what I'm not good at with a magazine picture collage
Value Yourself	3	What is important to me	- Knowing what's important to you to be a self-decision maker - Recognition of one's worth	Express what is important to me with a magazine picture collage
	4	My dream	- Recognition of one's worth - Recognizing the importance of dreams and the life I want in the future	Express my dream with a magazine picture collage

Plan	5	To do list	- Image yourself achieving your dreams and search for what you need to do to achieve your dreams	Image yourself 10 years later and express yourself as a collage of magazine pictures
	6	Planning Activities	- Recognizing the principles of goal execution - Establish an activity plan to achieve long-term and short-term objectives	Explore what needs to be done to achieve goals and prioritize execution
Act	7	Execute the goal	- Obstacle Awareness to Achieve Your Goals - Improve execution to achieve goals	Express in a magazine picture collage the obstacles to goal execution and what needs to be done to eliminate them
	8	My resources	- Awareness of the resources I have - Know how the resources I have help me achieve my goals and improve my ability to achieve my goals	Expressing the resources I have in a picture (internal resources, external resources, human relations resources)
Experience Outcomes and Lean	9	It's my right to claim it	- Forming a self-assertion strategy - Create effective and positive self-assertion methods	Learn how to claim your thoughts and rights in conflict situations through group Brainstorming
	10	My life that I make	- Having a positive self-image - Strengthening one's commitment to change	Looking back on the entire program and looking back and organizing the actions and minds that need to be done to achieve self-determination in life in the future

2.5 Data Analysis

The data obtained from the study were analyzed using SPSS Windows software version 24.0. This study used a nonparametric test that does not assume a normal distribution of data because the number of samples in the subject does not sufficiently satisfy the assumption of parameter statistics, and the specific data analysis method according to the research problem is as follows:

First, the reliability coefficient (Cronbach's α) value was calculated to verify the internal consistency of the measurement tool.

Second, to assess the effectiveness of college-oriented group art therapy, the Student Self-Determination Scale (SDSS) was administered before and after the intervention, and the results were analyzed using the Wilcoxon signed-rank test, a nonparametric test.

Third, the Korean version of the quality of life scale was administered before and after the intervention to test the effectiveness of the college-oriented group art therapy program. The results were analyzed using the Wilcoxon signed-rank test.

3. Results

3.1 Effects of Collage-Oriented Group Art Therapy on the Self-determination of University Students with Disabilities

To determine the effect of college-oriented group art therapy on the self-determination of university students with disabilities, a self-determination test was conducted before and after the program was implemented. The results are shown in Table 3.

[Table 3] Pre-Post Test Results for self-determination

Sub-factor	N	Pre		Post		-RANK(n)	+RANK(n)	Ties	Z
		M	SD	M	SD				
Know Yourself	5	6.40	1.52	9.40	1.82	.00(0)	3.00(5)	0	-2.06*
Value Yourself	5	6.80	.84	9.60	1.67	.00(0)	3.00(5)	0	-2.03*
Plan	5	9.20	.84	12.60	1.95	.00(0)	3.00(5)	0	-2.03*
Act	5	13.80	3.83	15.80	3.83	.00(0)	3.00(5)	0	-2.24*
Experience Outcomes and Lean	5	8.80	2.28	10.40	1.52	.00(0)	3.00(5)	0	-2.06*
The entire	5	49.20	6.42	56.20	7.66	.00(0)	3.00(5)	0	-2.03*

* $p < .05$

As presented in Table 3, statistically significant improvements were observed across all sub-factors of self-determination. Scores for “Know Yourself” ($Z = -2.06, p < .05$), “Value Yourself” ($Z = -2.03, p < .05$), “Plan” ($Z = -2.03, p < .05$), and “Act” ($Z = -2.04, p < .05$) all showed significant gains. Similarly, “Experience Outcomes and Lean” ($Z = -2.06, p < .05$) improved significantly. Overall, self-determination score(the entire scale) increased substantially between the pre- and post-tests ($Z = -2.03, p < .05$).

These results suggest that the level of self-determination among university students with disabilities increased following the implementation of a college-oriented group art therapy program.

3.2 Effects of Collage-Oriented Collective Art Values on the Quality of Life of University Students with Disabilities

To determine the effect of college-oriented group art therapy on the quality of life of university students with disabilities, a quality-of-life test was conducted before and after the implementation of the program. The results are shown in Table 4.

[Table 4] Pre-Post Test Results for Quality of Life

Sub-factor	N	Pre		Post		-RANK(n)	+RANK(n)	Ties	Z
		M	SD	M	SD				
Overall quality of life	5	4.20	.84	3.80	.84	1.50(2)	.00(0)	3	-1.41
General health awareness	5	2.80	.45	3.40	.55	.00(0)	2.00(3)	2	-1.73
Physical health	5	3.17	.19	4.03	.06	.00(0)	3.00(5)	0	-2.03*
Psychological health	5	3.00	.24	3.87	.62	.00(0)	3.00(5)	0	-2.03*
Social relationships	5	3.07	.72	4.00	.75	.00(0)	3.00(5)	0	-2.03*
Environmental health	5	3.50	.40	3.90	.61	.00(0)	3.00(5)	0	-2.03*
The entire	5	3.38	.27	3.86	.50	.00(0)	3.00(5)	0	-2.03*

* $p < .05$

As presented in Table 4, as a result of the analysis by sub-factors of quality of life, “Physical Health” showed a statistically significant difference in the pre- and post-tests ($Z = -2.03, p < .05$). “Psychological Health” showed statistically significant differences in pre-post tests ($Z = -2.03, p < .05$). “Social Relationships” showed statistically significant differences in the pre-post tests ($Z = -2.02, p < .05$). “Environmental Health” showed statistically significant differences in pre-post tests ($Z = -2.03, p < .05$). Quality of life (the entire scale) showed statistically significant differences between the pre- and post-tests ($Z = -2.03, p < .05$).

These results suggest that the collage-oriented group art therapy program had a positive influence on physical health, psychological health, social relationships, and environmental health. Overall, the intervention improved several sub-dimensions of quality of life among university students with disabilities.

However, overall quality of life ($Z = -1.41, p > .05$) and general health awareness ($Z = -1.73, p > .05$) were not significantly different between the pre- and post-scores of university students with disabilities.

4. Discussion

This study examined the impact of college-oriented group art therapy on the self-determination and quality of life of university students with disabilities. To this end, five university students with disabilities participated, and 10 sessions were conducted once or twice per week for 90 min between June and July 2025. The results were compared by administering self-determination and quality of life assessments to the students. The conclusions based on the results of this study are as follows:

First, the overall self-determination scores of students with disabilities significantly improved following participation in the college-oriented group art therapy program. This finding aligns with Lee (2004), who reported that the self-determination of students with disabilities increased after the implementation of Field and Hoffman’s (1995) self-determination program. In particular, Lee observed notable improvements in subjective self-determination among students with physical and neurological impairments residing in rehabilitation centers.

Upon examining each sub-area, statistically significant results were found for “Know Yourself” and “Value Yourself.” This finding is consistent with the finding that group members express themselves through college work, self-exploration,

self-awareness, and self-acceptance occurred (Yang & Lee, 2013). The inner image revealed through work becomes the key to understanding who we are and what we believe in (Loue, 2008), and it reveals ourselves through “visual thinking” (Arnheim, 1969). The Act of creating a work and seeing the result is another way of knowing (Allen, 1995). Collage, particularly, is a creative medium that enables self-expression and inner exploration through the use of various images and symbols, emphasizing participants’ autonomous choices and expressions. Therefore, it is believed that positive changes have occurred in the areas of “Know Yourself” and “Value Yourself”.

The “Plan” area also improved significantly, similar to the results of Lee and Yang’s (2016) study, which showed that a real-life therapy college program for students with disabilities positively changes career decision-making self-efficacy and career decision-making, affects the future plans of students with disabilities, and expects them to become someone in the future if they work hard. The college completes the work by selecting pictures that fit the theme from the magazine, placing the picture pieces on drawing paper, and planning a place to attach the images. It was determined that these college work processes and sessions, which practiced the principle of goal execution, had a positive impact on students’ planning area.

Finally, among the subareas of self-determination, significant changes were found in the areas of “Act”, “Experience Outcomes and Lean” . This finding is consistent with those of Field and Hoffman (1995). The areas of Act, “Experience Outcomes, and Lean” are the stages of comparing expected outcomes with outcomes and establishing awareness of performance and success. Students with disabilities apply what they have learned in the group and compare the results to measure whether they recognize their success or not. Students with disabilities envision their goals as college work, and this visualization process appears to have positively influenced their motivation to achieve the goal.

Second, the quality of life of university students with disabilities who participated in the group art therapy programs improved significantly in the subareas of physical health, psychological health, social relationships, and environmental health. This finding is similar to those of Lee Hea-suk (2014), who discovered that group art therapy had a positive impact on the quality of life of university students. Examining the results by subarea revealed significant improvements in physical health, psychological health, social relationships, and environmental health. Simultaneously, there were no notable changes in the overall quality of life and general health awareness. First, significant changes occurred in physical health, and physical energy was induced in the process of drawing and attaching magazines. The current situation was recognized through collage work, resulting in significant changes in the area of physical health.

Significant improvements were also noted in psychological health. This finding supports earlier research indicating that collage-based group art therapy promotes self-reflection, enhances reality awareness, and has a positive impact on mental health by allowing individuals to express their needs through the creative process itself (Yoon & Lee, 2015). Collage facilitates emotional expression by enabling participants to convey feelings through selected images, even without verbal articulation. Such imagery, often derived from magazines, allows the safe expression of dissatisfaction or negative emotions (Lee & Aoki, 2010).

Significant improvements were also observed in social relationships. This finding is consistent with Gil’s (2019) report, which suggests that group art therapy enhances social relations among patients with chronic conditions, and with Lee and Lee’s (2016) observation that such therapy enriches group dynamics and promotes self-introspection through member interaction. The effectiveness of group art therapy is further highlighted by its ability to produce tangible visual outcomes, which serve as focal points for shared reflection and dialogue (Pain, 2012). Finally, significant improvements were observed in the environmental domain. This result aligns with the findings of Lee Hea-suk (2014), who demonstrated that resources and interactions generated through group art therapy positively influenced the quality of university students’ lives within group environments.

There were no significant changes in the overall quality of life or general health awareness. It is believed that continuous surgery and rehabilitation due to disability, medication, and fatigue from using disability aids negatively affect satisfaction with one’s health status and overall quality of life.

There were no significant changes in the area of overall quality of life and general health awareness. It is believed that continuous surgery and rehabilitation due to disability, medication, and fatigue from using disability aids negatively affected satisfaction with one’s health status and overall quality of life.

5. Conclusion

In conclusion, collage-oriented group art therapy was found to enhance both self-determination and quality of life among university students with disabilities. These findings are consistent with Wehmeyer and Field (2007), who reported that higher levels of self-determination are associated with an improved quality of life.

Nevertheless, the study has certain limitations. First, group art therapy was conducted with a small sample from a single institution, which limits the generalizability of the results. Future studies should therefore include participants from diverse universities and disability groups to strengthen the evidence base. Second, the findings highlight the need for continued development of structured group counseling and art therapy programs. Such programs can foster independence and social maturity among students with disabilities and warrant further validation through both quantitative and

qualitative research.

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