

Research on the Development of Youth Grit Program

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Abstract: This study developed a grit program for adolescents. The subjects are 12 middle and high school students selected through doing surveys. The program was conducted once or twice a week for a total of 12 sessions, 50 minutes each, from March 2021 to May 2021. In order to measure the effectiveness of the program, data on self-efficacy, intrinsic future-oriented goals, and self-directed learning ability were collected before and after the program. The results of this study are summarized as follows. Adolescents in the experimental group were able to improve their elasticity to persevere toward their vision by looking positively at the inner strength and future that they could face in stressful situations. Therefore, the grit program developed in this study was found to be effective in improving grit for teenagers who are obsessed with academic performance, improving their learning ability and steadily promoting their goals with interest. The grit program is judged to be a useful on improving the grit of adolescents. This study is meaningful since it examines the effectiveness of the youth grit program which aims to promote the well-being and happiness among adolescents.

Keywords: Grit Program, Adolescent, Self-efficacy, Future-oriented

1. Introduction

1.1 The necessity of Research

Duckworth[1] has seen people who have outstanding achievements in their fields take a long time to achieve long-term goals and face obstruction and failure. However, a study of thousands of adults and students in various occupations found that grit is a key factor in success, arguing that successful people are related to persistence, and endurance as a trait of maintaining effort and interest in achieving long-term goals. Adolescents must also continue with sincerity, perseverance, and effort to plan and achieve long-term goals on their own. This is grit defined as a constant effort and persistence to achieve long-term goals. Grit consists of two factors: persistence of effort and consistency of interest. Grit becomes an important factor that greatly affects students' academic achievement as well as achievement in various fields. Those with high grit have a clear destination orientation and have a strong will to achieve their goals, and enjoy challenges and consider failure as an opportunity to learn[2]. In addition, students who want higher achievements with passion and enthusiasm for academic achievement have more grit than those who avoid learning.

Previous studies conducted to improve academic achievement for adolescents so far include self-directed learning ability programs, learning strategy programs, self-regulated learning training programs, and motivation programs. Most of these studies focus on cognitive factors. In the past, achievement was thought to be determined by cognitive abilities such as innate intelligence and aptitude, but increasingly, non-cognitive factors such as grit, motivation, persistence, and self-efficacy are becoming more important[3].

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There are a few studies related to educational intervention for grit conducted in Korea. Ahn and Lee suggested that grit could be promoted by developing group play therapy for college students[4]. [5] reported the effect of conducting grit programs to prospective infant teachers to increase grit, resilience, teaching efficacy, and teaching enthusiasm and lower practice anxiety. Jeong[6] developed a grit coach program to improve high school adaptation and activity competency, and then improved grit, school adaptation, and activity competency. [7] developed a grit program for middle school students and revealed that grit was effective. Therefore, it is necessary to improve students' grit in an efficient way to help many adolescents effectively solve the pressures caused by academic stress and lead a successful life. This study intends to develop a grit program through grit training as a way to improve students' academic achievement. In addition, it differs from existing programs suggested by Duckworth[8] and the grit practice method proposed by integrating grit to form a program by Baruch-Feldman[9].

Despite the importance of grit, there are few empirical studies on grit and development of programs to improve grit among young people in the educational field. Considering this situation, it is very meaningful to develop a program in promoting grit among adolescents. Therefore, the purpose of this study is to develop a grit promotion program and to find out its effects on increasing the grit score. Therefore, the purpose of this study is to develop a grit promotion program and to find out what the effect is.

1.2 Research Questions

This study aims to develop a grit program and verify its effectiveness. In order to achieve this research purpose, the following research questions were selected.

First, how was the grit program development process organized?

Second, what is the grit program effect?

2. Theoretical Background

Grit, as defined by Oxford dictionary, is the power of courage, determination, and temperament that allows someone to continue something that is not difficult and enjoyable. In Korean dictionaries, it is translated into fighting spirit. Domestic researchers translated it into fighting spirit as well or persistence. Since domestic research on grit has recently begun, there is a limitation where the translated language cannot fully convey the meaning of the original language, and there is no fixed term yet, so this study used the expression of grit as it is.

Duckworth[8] argued that the support provided in the surrounding environment helps and promotes the development of grit at all stages of interest, practice, purpose, and hope. In fact, Kim[10] revealed that the support of friends, a pleasant class atmosphere, teacher support, and free communication are environmental factors that foster grit for teenagers at school. In addition, a study by Cho[11] found that positive peer relations had a positive effect on grit. In this way, in order to develop grit for adolescents, the stages of development of interest, practice, purpose, and hope are important, but it can be seen that grit is important to form a supporting relationship that supports each other. Therefore, in this study, in order to apply Duckworth's grit development process and develop grit more effectively, a learning atmosphere was formed in which teachers could support students, encourage students, and maintain good relationships.

2.1 Grit Development in Adolescence

In adolescence, as awareness of oneself and the world expands, interest in career and social demand for academic achievement increases, making it easy to experience academic burnout. However, it is

important to improve grit during adolescence because the higher the grit, the less you experience academic burnout, and the higher your self-efficacy and academic achievement.

Duckworth[8] cited parents as a factor influencing grit in adolescents. Parents are the first objects of attachment to their children and are both caregivers and educators. The way parents raise their children's grit is important, but more importantly, it is wiser to have their children want to use them as role models and to imitate them. Children have a very strong instinct to imitate adults. Therefore, parents should first set an example of grit and show persistence and passion for life's goals. Research supporting this includes a study by Hwang and Kim[12] that shows that the higher the mother grit level, the higher the child grit, and the parent grit has a positive effect on the child's grit. In addition, it was found that the more positive parents support their children and generously give affection and love, the better the grit of adolescents[13].

Lim[14] examined the structural relationship between grit, creative tendencies, and creative thinking. In this study, grit had a positive effect on the individual factors of adolescents, while creative tendencies and creative thinking had a significant effect on grit. In addition, variables related to happiness and life satisfaction, which are personal factors of adolescents, were found to have a positive effect on grit[15].

Grit also affects career-related variables, and Kim[12] reported that grit of college students directly or indirectly affects career decision-making self-efficacy, major interest, career outcome expectation, and career preparation behavior. Seo and Yoon[14] indicated that the grit of pre-child teachers affects career preparation behavior.

It was also found that grit could serve as an important mechanism to improve the ability to overcome trials. According to a study of 1,692 American adolescents by Kim and Park[15], Grit showed a stable tendency over time, such as personality characteristics, and the effect of grit on its ability to overcome trials was positively significant. This means that the high grit level of middle school students has a positive effect on high school students' grit, and that students who overcome difficulties in middle school overcome the crisis well even when they become high school students. As grit turned out to be a factor influencing life satisfaction beyond academic and career achievement, many researchers stressed that grit should be raised to help adolescents prepare for their studies and careers and promote healthy development throughout their lives.

In this way, in adolescence, students must have constant efforts and passion to develop academic achievement under the pressure and worries about studies and career paths. In addition, the higher the grit of adolescents, the more they are reported to continue to strive to achieve the objectives they set, which reminds them of the need to develop a grit program for youth.

2.2 Prior Research on Grit Programs

As a result of analyzing doctoral papers related to the domestic grit program, the existing grit program developed for middle school students was Han[16] and Jeong[17]. Han's grit programs for middle school students[18] had a positive effect of improving grit and mastery goals. As a result of developing a persistence coaching program by Jeong[18][19], self-efficacy, self-regulation, and emotional scale were improved, and when various variables that significantly affect persistence were verified, students with high persistence were expected to adapt well to school.

Lee, Tak, Lee[5] developed a group play therapy program for grit and showed that they had an effect on grit. They showed that grit, resilience, teaching efficacy, and teaching enthusiasm of pre-infant teachers increased and practice anxiety decreased through the grit program.

As in previous studies above, demand and interest in grit are on the rise, but only a few efforts have been made for the grit program[5]. Therefore, it is necessary to develop various grit programs. The researcher developed the program by utilizing the program developed by Baruch-Feldman[9], and tried to increase the effectiveness by referring to career programs that have been conducted in middle and

high schools for over ten years. Currently, grit theory research has been actively conducted in the U.S., but in Korea, it seems that prior research on grit programs is insufficient as related research has not yet begun. Therefore, it seems to be of great significance to develop a grit program for teenagers. The contents of each grit program session are shown in [Table 1].

[Table 1] Contents for Each Session of the Grit Program

Sortation	Session	Topic (Related factors)	Goals for activities	Major activities	Way
Understand grit	1	Understanding grit	<ul style="list-style-type: none"> • Motivation for the program • Introduce yourself • A deep cognitive understanding of grit • Grit official understanding 	<ul style="list-style-type: none"> • Introduction of the purpose and contents of the program • Group rules • Description of grit (video) 	<ul style="list-style-type: none"> • Overall introduction • Grit audiovisual • Individual presentations
Change thinking	2	Changing thoughts for a positive mind (reasonable thinking)	<ul style="list-style-type: none"> • Understanding rational thinking • Transforming inappropriate emotions and thinking into rational thinking 	<ul style="list-style-type: none"> • Understanding rational thinking and irrational thinking • Understanding the emotions and behaviors of rational and irrational thinking according to circumstances • Use rational thinking by applying it to yourself 	<ul style="list-style-type: none"> • Conceptual explanation • Individual presentations • Application
	3	Raising optimism (optimism)	<ul style="list-style-type: none"> • Understanding that one can sublimate one's shortcomings into strengths • Write down what you want to supplement (defects) • Being grateful for positive thinking 	<ul style="list-style-type: none"> • Write down the words that your friends changed to your strengths • What you felt about changing your strengths (disadvantages) to your strengths • Come out in front, realize the situational play, and change it to an advantage 	<ul style="list-style-type: none"> • Optimism explanation • Individual presentations
	4	Developing a growth mindset (growth mindset)	<ul style="list-style-type: none"> • Understand growth mindset and fixed mindset • Change your fixed mind set to a growth mind set 	<ul style="list-style-type: none"> • Explain the concept of growth mindset and fixed mindset • Understand through example sentences and think about your case • Write it in a workbook and then present it 	<ul style="list-style-type: none"> • Audiovisual materials • A lecture on the concept of growth mindset • Individual presentations
	5	Identify my interests (attention)	<ul style="list-style-type: none"> • Measure your grit • Understand your interests • Identify your interests and do it 	<ul style="list-style-type: none"> • Measure your grit and figure out your grit level • Understand yourself through your interests • Identify your interests 	<ul style="list-style-type: none"> • Presenting your interests
Behavioral change	6	For my goals! (Goals for each step)	<ul style="list-style-type: none"> • Set specific goals. • Motivate long-term goals by setting top, middle, and bottom levels • Draw a goal or a few years from now 	<ul style="list-style-type: none"> • Understand top, middle, and lower goals • Top goal, middle goal, and lower goal • Set goals • Draw yourself achieving the highest goal 	<ul style="list-style-type: none"> • Step-by-step goal presentation • Individuals and groups
	7	Practicing consciously (Practicing consciously)	<ul style="list-style-type: none"> • Continuously implementing sub-goals • Grouping up to confirm steady practice 	<ul style="list-style-type: none"> • A more specific planning plan to continue to keep the sub-goals • They give feedback so that we can make a group and protect each other 	<ul style="list-style-type: none"> • Conscious explanation of practice • Individual presentations

	8	Self-control training (self-control)	<ul style="list-style-type: none"> • Understanding self-regulation • Learning and applying self-control methods • Finding rewards to make self-control a habit 	<ul style="list-style-type: none"> • Understanding self-control • Initiative for a way to habituate self-control 	<ul style="list-style-type: none"> • Self-control explanation • Individual presentations
	9	Repeated training toward vision (grit habit)	<ul style="list-style-type: none"> • Identify what action plans are in order to achieve the vision (higher goals) • Systematization of continuous and long-term efforts through implementation evaluation 	<ul style="list-style-type: none"> • Specific analysis and goal setting for execution in the execution process • Intensive training with expertise in one's field of interest • Check whether each other is executing a plan and give feedback 	<ul style="list-style-type: none"> • Explanation of repetitive training • Individuals and groups
Overcoming the grit barrier	10	Dealing with stress (overcoming stress)	<ul style="list-style-type: none"> • Self-control development • Corrective action by realizing the obstacle situation through a situational play 	<ul style="list-style-type: none"> • Having a mind to objectively evaluate the situation, reconstruct stressors, and grow • Re-realizing and applying the obstacle situation to act out a situational play • Telling your determination by announcing how to deal with the situation next time 	<ul style="list-style-type: none"> • Individual presentations • A skit
	11	Grit through audit (audit)	<ul style="list-style-type: none"> • Be grateful (self, parents, brothers, people around you, environment) • Raising positive thinking through audit 	<ul style="list-style-type: none"> • Feel what you are grateful to yourself, your surroundings, and what you are grateful to people while writing thank you 	<ul style="list-style-type: none"> • Audiovisual materials • Individual presentations
Resolve	12	make my resolve	<ul style="list-style-type: none"> • Reinforce your resolve for change by organizing the entire program 	<ul style="list-style-type: none"> • Announce your commitments through the Grit program • Preparation of the post evaluation sheet 	<ul style="list-style-type: none"> • Realization , Resolution announcement. • Preparation of the post evaluation sheet

3. Experience Report After Participating in the Program

3.1 Satisfaction Results

A grit program was conducted on 12 middle and high school students. Thus, dependent on existing laws on data privacy, this study secured a written consent from the parents or legal guardians of the subjects. Also human subjects were made aware of the ethical issues raised by the study such as informed consent and confidentiality. A survey was conducted to find out the satisfaction of students with the contents, operation, and composition of the program through a five-point Likert scale. The results of the satisfaction survey on the program content are presented in [Table 2].

[Table 2] Results of the Satisfaction Survey on the Contents of the Program (N=12)

Session	Topic	Average	Standard deviation
1	Let's find out about grit!	4.8	0.4
2	Find out my grit score	4.7	0.5
3	Being optimistic	4.8	0.4
4	Developing a growth mindset	4.7	0.5

5	Understanding my interests	4.8	0.4
6	For my goal!	4.8	0.4
7	Conscious practice	4.9	0.3
8	Self-control training	4.9	0.3
9	Repeated training for vision	4.9	0.3
10	How to deal with stress	4.9	0.3
11	Grit through audit	4.8	0.4
12	Resolution before and after the program	4.7	0.5

Regarding the contents of the program, all participating students answered that they were satisfied or very satisfied, indicating that the level of satisfaction was very high. Students were curious about the new concept of "grit" in the program, and through activities to promote "grit" every session, they developed optimism and viewed them positively through their friends' presentations. Through the growth mindset set, intelligence can be developed through effort, and students seem to have high satisfaction as they think and plan ways to achieve their goals by changing their thinking. Training to write action methods for goals, overcome obstacles, and make steady efforts has raised confidence in learning and aroused willingness. In addition, whenever friends made a presentation, the presenter experienced an acceptance feeling and self-esteem improvement when he encouraged, acknowledged, supported, and focused on the expression "Oh, I see!" Among the participants who expressed themselves and faithfully announced themselves, the fact that they selected the workbook that best revealed themselves and encouraged them with products in each session also seems to have served as an opportunity to increase solidarity. [Table 3] shows the results of the satisfaction survey on the operation and effectiveness of the grit program.

[Table 3] Results of Satisfaction Survey on Program Operation and Effectiveness

	Question	Average	Standard deviation
Program operation	I enjoyed participating in the program	4.9	0.3
	I actively participated in the program	4.8	0.4
	I trusted the leader's expertise in grit	4.9	0.3
	It was very helpful to participate in the program in the leader's program progress method	4.8	0.5
Program effect	It helped me understand grit	4.8	0.4
	It helped to improve grit (steady effort, passion)	4.9	0.3
	It helped transform irrational thinking into rational thinking	5.0	0
	It helped to have grit action strategies (goal practice)	4.9	0.3
	It helped overcome the barriers to grit (overcoming stress)	4.8	0.4
	I want to participate in this program again next time	4.9	0.3
	I want to recommend this program to others	4.9	0.3

3.2 Results of the Experience Report

This program records and presents the contents of the topic in a work magazine every session, and at the end of each session, it is organized to write a speech and make a decision and wrap up the session before sharing the whole feeling. The intention of this composition is to provide time to organize one's thoughts and feelings while writing workbooks, thoughts, and decisions, and one or more workbooks are usually included in one session. Specific workbooks for each session were presented. The program activity report records the most memorable content in each session, the reasons why it remained in mind, and what was learned through one session, and what was difficult or difficult during the program, and

presented the results of the program activities.

The content validity of the program is to be verified by reviewing the contents of the youth grit program in various ways. To this end, based on the paper and experience report, which were the presentation materials of the participants during the program, and the observation of this researcher, general responses of participants in each session were investigated, and case analysis was presented for some of them. At the end of the entire program, the results of the evaluation and experience report on how the participants evaluated the content, progress, and the host of the program, and how the program was specifically helpful were presented.

4. The Grit Program Effect

Introducing the Youth Grit Program and ensuring that the participants understand grit is covered in the first session. Participants gathered for the first session of the program had expectations and some tension, but this anxiety was largely resolved when the first activity, self-introduction, and alias games began, and it seemed to have been an opportunity to "sing nicknames" and get close to each other. In addition, at the beginning of the second activity on 'Grit' after explaining the grit, the participants initially responded, such as 'What is grit?' and struggled. Researchers help them fully understand the concept of grit through videos, encourage and support them to present as they understand, and induce responses through feedback, establishing concepts through video and friends' presentations, and increasing concentration on programs. The data shown in the first session program experience report are summarized in [Table 4] below.

[Table 4] Summary of the Experience Report for the First Session

Major experiences	The responses of the participants
A clear understanding of grit	<ul style="list-style-type: none"> ■ I always thought that others were better than me because they had excellent talents and I couldn't do it because I didn't have talent, but I don't think I was sincere without trying. ■ It was a time to consider and know me more, and a time to know the direction of my mindset and actions in the future.
Interest in grit	<ul style="list-style-type: none"> ■ Through various activities, I became more interested in grit and wanted to know more deeply. ■ It was good to hear not only the concept of grit I wrote, but also grit that my friends understood. ■ I didn't know the term grit well, but when I announced the meaning and meaning of the term, I realized a lot. ■ If I practice this grit and continue to implement it, I will be satisfied with myself who values the process rather than the result.

The second session attempted to have an opportunity to learn about reasonable and irrational thinking and to grasp one's beliefs about how irrational thinking affects one's life. In addition, participants do not realize what they think more when they do not understand the concept of rational and irrational thinking, but after recognizing the concept, they quickly realize that "this idea is irrational." Through this, it could be seen that just a clear understanding of the concept has the effect on raising reasonable thinking. In addition, through the work magazine, it can be seen that participants pledge to continue training rational thinking and live with reasonable thinking while changing irrational thinking to reasonable thinking. [Table 5] shows the responses of the participants.

[Table 5] Summary of the Experience Report for the Second Session

Major experiences	The responses of the participants
Understanding of rational way of thinking	<ul style="list-style-type: none"> ■ I didn't know I had a lot of irrational thoughts, but through this time, I felt that I had a lot of irrational thoughts, and I came to understand how to change to rational thoughts through practice.

Application to rational way of thinking	<p>■ When I learned how to do it, I decided to do it like that.</p> <p>■ When I announced my method, I decided to cope with the next situation.</p> <p>■ When my feelings are depressed and angry, I should look back on what irrational thinking I had and try to change it to a reasonable thinking.</p> <p>■ I always thought negatively when I faced a difficult or difficult situation and thought in an irrational way. However, through today's program, I realized that a reasonable mindset can create a positive effect by allowing me to challenge and strive for difficult tasks to produce better results.</p>
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The third session was a time when friends recognized that their shortcomings could also be advantages due to their understanding of optimism activities, wrote their shortcomings in the ballot box anonymously, and turned them into advantages. It was a disadvantage that the participants had not told their friends because they wrote and submitted their shortcomings anonymously, but when their friends sublimated them into their shortcomings, the participants became confident in their happiness. As such, the third session reminds us that a shift in thinking is important as we look at ourselves optimistically. The data shown in the program experience report for the third session are summarized in [Table 6].

[Table 6] Summary of the Experience Report for the Third Session

Major experiences	The responses of the participants
Understanding of optimism activities	<p>■ I learned that disadvantages can also be advantages. From now on, I should try to change my shortcomings into strengths and make a kind heart without thinking too critically of me.</p> <p>■ I think today's activities were an opportunity to think positively. It was also fun to find my positive thoughts and strengths of my friends.</p>
Improving self-esteem	<p>■ I always thought about disadvantages, but through the program, I came to think that I am a person with many advantages.</p> <p>■ Through the presentation, I gained confidence because my friends seemed to look at me positively by changing my shortcomings to strengths.</p> <p>■ Lack of confidence has always come to me as a big drawback, but I'm glad it's an opportunity to develop confidence. And I have humility. It was good to receive encouragement such as the strength of 'etc.'</p> <p>■ Since I sublimated my shortcomings into advantages and talked about them, it was good that all my bad things could be advantages in a way. When I started to think positively about the bad part, I felt only good things about me, so I felt proud for some reason.</p>

In the fourth session, the participants will have time to understand the concepts of fixed mindsets and growth mindsets, break the fixed mindsets within them, and have a growth mindset. Through growth mind set training and work magazine activities, the researcher said, "That friend must have done well because he is smart, I wouldn't have come out because I was smart," and turned their thoughts into a growth mind set, saying, "If I study like him, I can improve my grades." [Table 7] shows the data shown in the program experience report for the fourth session.

[Table 7] Summary of the Experience Report for the Fourth Session

Major experiences	The responses of the participants
Understanding growth mindset	<p>■ I was able to break my fixed mind set, and I learned how to get up again even if I fell and struggled.</p> <p>■ I've thought there was a limit, but I felt that through today's time, efforts could develop knowledge.</p>
Empathy with friends' presentations	<p>■ I was impressed by a friend who said, "That child is great, I should imitate him!" with a fixed mind set that said, "I can't keep up with his intelligence even if I try."</p> <p>■ The thought of "It's different even if you try" is memorable when a friend announced, "You just have to try harder to give it to others."</p> <p>■ I think I was the only one who thought of the fixed mind set. I was reluctant to present, but when I heard my friends' presentations, it comforted me because there were many common parts.</p> <p>■ When I changed my stereotypes to positive thoughts and changed my limitations to good thoughts, I somehow felt that I could become a better person. Based on this, I thought I should work with a positive mind in my studies.</p>

The first to fourth sessions were a process of making people believe in how to improve their grit through a clear understanding of Rapo formation and grit, rational thinking, optimism, and growth mindset. In the fifth session, participants had time to explore themselves by grasping what their interests were, but they became familiar with each other by presenting their interests. And through their interests, they gave each other a task to decide on one’s dream while thinking about the direction of one’s desired career path. The data shown in the fifth session program experience report are summarized in [Table 8].

[Table 8] Summary of the 5th Session of Experience Report

Major experiences	The responses of the participants
Identifying one's goal	<p>■ I was able to think about what I was interested in once more. Also, I think I can only know if I always try to know myself. I should think more about it in the future.</p>
Forming intimacy	<p>■ I was shy to tell my friends my strengths, but it was good to be respected. ■ I think I will understand my friends better in the future because I can know their interests. ■ It was good because my friends seemed to get closer and closer. ■ As I grasped my interests, I thought I could decide on the college and career path I wanted based on what I liked and did better. It was good to know each other indirectly, if not directly, while looking at the interests of other friends besides me.</p>

In the sixth session, we set goals step by step and had an opportunity to take a step further to the final goal. In response, there were common opinions that it was good to make specific plans for dreams while preparing upper, intermediate, and lower goals. Participants also shared the opinion that step-by-step goals are more efficient in implementing plans for goals because they can come up with more realistic and viable plans rather than just looking at vague end goals. The data shown in the sixth session program experience report are summarized in [Table 9] below.

[Table 9] Summary of 6 Sessions of Experience Report

Major experiences	The responses of the participants
Understanding the goals step by step	<p>■ I was able to make a specific plan to achieve my dream while writing an upper goal, an intermediate goal, and a lower goal. ■ It was good to know my dream and to know how to go toward my dream, so I took a step further in finding my dream.</p>
Resolution through activities	<p>■ My friend's detailed goals could be applied to me, so I could supplement and modify them. ■ Listening to my friends' goals, I was stimulated, and I thought I should try to keep my lower goals. ■ I made a plan to watch YouTube related to medical school in my lower goal, but I should keep it from today. ■ After making my dream visible, I felt like I was getting closer to my career path. If I achieve the easiest sub-goals one by one among the goals I have decided to do, I think the day will come when I can reach my career path, the doctor.</p>

In the seventh session, it is important to set goals, but the researcher set sub-goals for each step of the goals, continuously practiced them, and practiced consciously so that they could be implemented without ambiguity. Participants decided to continue to practice and strive by presenting sub-goals of their step-by-step goals. The data shown in the seventh program experience report are summarized in [Table 10] below.

[Table 10] Summary of the 7th Session of Experience Report

Major experiences	The responses of the participants
Resolution through conscious practice	<p>■ When I wrote a conscious practice focusing on the sub-goal, I think I can practice hard with a clear goal set.</p>
Forming a sense of responsibility	<p>■ Since I announced it to my friends, I felt responsible for keeping it, so I should keep it consistently. ■ I should keep asking if my friend is watching well.</p>

	<p>■ I want to do better because I decided to make sure that my friend and I are keeping our plans.</p> <p>■ It was good to see things that felt very far away as they became things that I could do in my daily life while transforming my sub-goal into conscious practice. I made it possible for me to practice with conscious practice, so I thought I should try it myself after today's program.</p>
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In the eight session, they had time to think, understand, control and train the other person's position, and as a way to control themselves, they helped participants understand and apply these concepts to themselves along with examples. Participants wrote control plans in various ways among the five ways to control them, showing their willingness to "try to implement control methods at first, although I don't think it's going to work well." Accordingly, it was supported so that each group could continue to practice steadily by refraining from using mobile phones. The data shown in the eight program experience report are summarized in [Table 11] below.

[Table 11] Summary of 8 Sessions of Experience Report

Major experiences	The responses of the participants
Do self-control training	<p>■ It will be difficult for control to take place immediately from the beginning, but I need to work harder to develop my ability to control. Honestly, it was nice to be able to think of ways to control while writing that I would turn off my cell phone when I was studying.</p> <p>■ After self-control training, when there are many temptations, I will overcome it based on what I wrote.</p>
Self-control application	<p>■ I felt good because I thought I could develop while making a way to control my problems on my own through self-control training. While using these strategies in real life, I hope that my control over myself will increase and be well applied to my studies or what I want to do.</p> <p style="padding-left: 40px;">■ I should keep checking with my friends to implement self-control.</p> <p>■ Through this program, it is possible to select more situations. And I was able to know and write selective concentration, cognitive change, and response control, and I realized my mind once again.</p>

The ninth session was a repetitive training for vision, taking time to evaluate oneself and re-determine whether they were implementing the part they had set as goals. Participants were trying to write "YES" in this question, and because they decided on a group of two or three, they were able to see them work more deliberately with willpower. The data shown in the ninth program experience report are summarized in [Table 12].

[Table 12] Summary of the Experience Report in Session 9

Major experiences	The responses of the participants
Understanding repetitive training	<p>■ It was time to evaluate me whether I was implementing the part that I set my goal.</p> <p>■ It was a good opportunity to exchange feedback with friends and keep it.</p>
Relationship	<p>■ When I announced my evaluation in front of my friends, I wanted to reveal what I did well. I think that's why I practiced harder.</p> <p>■ Even after this promotion, I hope you get feedback from your teachers and friends. I had a big heart to do that.</p> <p>■ In a way, I tried and in a way, I lacked effort, but it was better because my friends judged me objectively.</p> <p>■ Repeated training seems to have been a very important evaluation for repeated training for intermediate and sub-goals toward the vision.</p>

In the tenth session, they had time to understand how to cope with their stress, starting with their studies. In the process of implementing the plan for the final goal, they were able to think of a situation where the presenter was disturbed in the face of stress and express it in a picture, so they could see that the presenter was sincere and deliverable to the friends around the presenter. The friend who wrote about the stress situation had time to objectively look at the situation through the presentation. And looking at the situation objectively, the participants became less anxious about their stress situation, and as they had the hope of solving it, they were able to have the ability to cope with stress. The data shown in the

tenth program experience report are summarized in [Table 13] below.

[Table 13] Summary of 10 Sessions of Experience Report

Major experiences	The responses of the participants
Understanding how to deal with stress	<ul style="list-style-type: none"> ■ When you're stressed out when there's no noticeable improvement in grades even if you study and try for a long time, 'Let's do it one more time now. If you think of it as a process to succeed, you will be able to cope with stress.
Communication with friends	<ul style="list-style-type: none"> ■ It was good to know that other people were also worried about the same thing, and I think I can reduce stress a little as I learn the solutions to my problems. <ul style="list-style-type: none"> ■ It was a good time to talk to friends about ways to reduce stress. ■ I felt that other friends were having similar concerns to me. ■ When studying for the exam, there were times when I held on for more than a few hours without leaving one unit to understand the contents. However, I should relieve my stress with the idea and method of "I realized that I could study step by step without having a mind to be perfect from the beginning, let's spit it out in words like when I let my friend know or present it."

The eleventh session is a time to promote grit through audit, and assignments were given in advance so that the conditions of audit could be found in life and three things to be grateful for each day. Through the time of recording 21 audit titles a week, three times a day, and presenting them to each other, they shared their gratitude, saying, "When I wrote audit notes, I realized that there were many things to be grateful for," adding, "I learned that I could feel grateful for even the small things." The data shown in the eleventh program experience report are summarized in [Table 14].

[Table 14] Summary of 11 Sessions of Experience Report

Major experiences	The responses of the participants
Positive thinking through audit	<ul style="list-style-type: none"> ■ After writing a thank-you diary, I found at least two grateful things every day. ■ In addition to what I am currently grateful for, I think there are more happy things to do as I am grateful for what will happen in the future.
Communication with friends	<ul style="list-style-type: none"> ■ I should think of a lot of things to be grateful for while watching today's video that you can get better results if you take the test after thinking about what you are grateful for. ■ As I began to appreciate things that I had taken for granted or familiar with, I think I was able to see everything that happened in a day positively. At first, I felt awkward and ashamed, but as I continued, I felt that there were many things I had to thank in my life.

In the twelfth session, if the grit program has been conducted so far, they will have time to compare their changes before and after the program and pledge their future. Through this program activity, participants gave more meaning to growth mindset and optimism time, and it was a common opinion that they would work hard positively with grit to continue to fulfill their dreams in step-by-step goals for behavior change. Accordingly, the program was concluded, and there was time to make a decision and declare. The data shown in the twelfth program experience report are summarized in [Table 15] below.

[Table 15] Summary of 12 Sessions of Experience Report

Major experiences	The responses of the participants
Step-by-step goals	<ul style="list-style-type: none"> ■ After the program, I tried to practice my goal by thinking about my dream job and searching for materials. ■ After the program, I didn't know what I wanted to do and what fit my aptitude, and I only thought my dream was far away. It was too vague to say dream. But it seems to be more concrete now. ■ After the program, I was able to get closer to the dream by setting goals and further subdividing them to achieve my dream.
Positive thinking through audit	<ul style="list-style-type: none"> ■ After writing a thank-you diary, I found at least two grateful things every day. ■ In addition to what I am currently grateful for, I think there are more happy things to do in the future.

Optimism	<ul style="list-style-type: none"> ■ After the program, I always tried to see positively and had a mindset that I could do anything. Also, I think I have the patience to not give up.
Growth mind set	<ul style="list-style-type: none"> ■ After the program, I knew what I needed to develop, but I left it unattended because I was lazy. In particular, I wasted time in useless places such as watching smartphones or playing with friends rather than studying. ■ After the program, I thought that if I really worked hard, I would someday be as good as a smart person. And even in difficult situations, I think I can overcome it well.
How to deal with stress	<ul style="list-style-type: none"> ■ After participating in the program, I came to see myself positively and it was a good time to prepare for the future by learning how to cope with stress. ■ After participating in the program, I learned stress management, increased concentration, and learned how to concentrate on one thing.

5. Conclusion and Suggestion

The purpose of this study is to develop and verify the effectiveness of youth grit programs in order to promote the well-being and happiness of life in which teenagers move toward their own goals and continue to implement plans for difficult problems.

This study would like to discuss the development of this program. First, a demand survey was conducted to devise a program suitable for the subjects to which the program is applied. Through this, the needs and preferences of the subjects for the grit program were analyzed, and information on the implementation of the program was obtained. This reflects the proposal of previous studies that research needs to be conducted centered on beneficiaries when developing programs. Second, in order to clearly understand and implement grit, this study developed a program by systematizing the factors related to grit. The first half of the program consisted of grit concepts, rational ways of thinking, optimism, growth mindset, and interests so that grit could be thought while understanding grit. Third, this program developed and applied various teaching and learning methods. Prior to the development of this program, it was possible for teenagers to have an active attitude by introducing what they wanted in terms of program content and format through a demand survey. Since lecture-oriented ones are likely to participate passively, they were conducted as effective teaching methods for learning the relevant learning contents among case sharing, lectures, presentations, discussions, audiovisual materials, and role plays. Fourth, the composition of this program gave everyone an opportunity to present their opinions in order to observe each student's attitude to achieve their career path and to have enough time to have enough time to express their opinions. Based on a study, which argued that the lecture-style information delivery method would not help students change their individual career attitudes, participants who first wrote the work magazine will be given time to present. It was judged that participants could not only have enough time to present, but also express their opinions individually and be more active in participating in the program.

While reviewing the limitations of this study, the researchers would like to make suggestions for future follow-up studies. First, since this program observes each student's attitude to think about their career path and achieve their goals, it was judged that they could express their opinions and be more active in participating in the program. Then, it is necessary to investigate how grit acts differently on career decision-making and undecided goal achievement through continuous follow-up studies. If it is revealed how the two factors work differently, it will provide specific effects on the two factors. Second, this research failed to attempt a longitudinal study. It is necessary to investigate whether grit affects school adaptation through longitudinal studies. Grit is also influencing interpersonal relationships. Previous studies show that the two factors have different influences on academic adaptation. Through continuous follow-up studies, it is necessary to verify whether grit-high students actually have a great influence on school adaptation.

Reference

- [1] A. L. Duckworth, M. E. P. Seligman, Self-discipline gives girls the edge: Gender in self-discipline, grades, and achievement test scores, *Journal of Educational Psychology*, (2006), Vol.98, No.1, pp.198-208.
DOI: <https://doi.org/10.1037/0022-0663.98.1.198>
- [2] B. Goodwin, K. Miller, Grit+ talent=student success, *Educational Leadership*, (2013), Vol.71, No.1, pp.74-76.
- [3] S. Y. Han, Exploring the Personal and Social Predictors of the Longitudinal Changes in Grit and Examining the Effects of the Program to Improve Grit, Chungnam National University, Doctoral Dissertation, pp.10-17, (2019)
- [4] H. Y. Ahn, H. J. Lee, Development and Verification of the Effectiveness of a Group Play Therapy Program to Improve the Grit of University Students, *The Study of Child-Family Therapy*, (2021), Vol.19, pp.46-63.
- [5] M. R. Lee, J. H. Tak, H. W. Lee, Development and effects of grit enhancement program for pre-serviced early childhood teachers, *The Journal of Learner-Centered Curriculum and Instruction*, (2020), Vol.20, No.17, pp.1255-1282.
DOI: <https://doi.org/10.22251/jlcci.2020.20.17.1255>
- [6] K. S. Jeong, The Effects of the Grit Coaching Program on High School Student's School Adaptation and Activity Competence, Yeungnam University, Doctoral Dissertation, pp.10-21, (2018)
- [7] S. Y. Han, H. E. Yoo, Y. H. Park, Effects of a Grit Enhancement Program on Middle-School Students' Perseverance of Effort and Consistency of Interest: Differences by Mastery Goal Level, *The Korean Journal of Educational Methodology Studies*, (2021), Vol.33, No.1, pp.1-28.
- [8] A. L. Duckworth, Abigail Quirk, Robert Gallop, R. H. Hoyle, D. R. Kelly, M. D. Matthews, Cognitive and noncognitive predictors of success, *Psychological and Cognitive Sciences*, (2019), Vol.116, No.47, pp.23499-23504.
DOI: <https://doi.org/10.1073/pnas.1910510116>
- [9] Caren Baruch-feldman, *The grit guide for teens*, Instant Help Books, pp1.-144, (2017)
- [10] M. S. Kim, S. H. Lee, S. H. Baek, Y. S. Choi, The environmental factors affecting students' grit scores and their differences across sex and grade, *The Journal of Learner-Centered Curriculum and Instruction*, (2015), Vol.15, No.5, pp.297-322.
- [11] Y. S. Kang, K. M. Lee, The Effect of Teachers' Autonomy and Students' Support of Relationship Between Their Peer in Physical Education Class in Middle School : The moderating effect of mindset, *Teacher Education Research*, (2019), Vol.58, No.4, pp.483-500.
DOI: <https://doi.org/10.15812/ter.58.4.201912.483>
- [12] Y. J. Hwang, C. G. Kim, The Effects of Parents' Grit on Children's Grit -Double Mediating Effects of Parental Autonomy Support and Coercion-, *Journal of Future Oriented Youth Society*, (2020), Vol.17, No.4, pp.27-47.
DOI: <https://doi.org/10.34244/JFOYS.2020.17.4.27>
- [13] Jeon Hyang Shin, Park Bunhee, The Structural Relationship of Mother Grit, Child Grit, Academic Engagement and Academic Helplessness:Multiple Group Analysis by Gender, *Korean Journal of Youth Studies*, (2020), Vol.27, No.8, pp.329-355.
DOI: <https://doi.org/10.21509/KJYS.2020.08.27.8.329>
- [14] E. J. Seo, J. J. Yoon, Mediating Effect of Career Decision-Making Self-Efficacy on the Relationship between Grit and Career Preparation Behaviors in Preservice Early Childhood Teachers, *The Journal of Learner-Centered Curriculum and Instruction*, (2019), Vol.19, No.17, pp.1195-1210.
DOI: <https://doi.org/10.22251/jlcci.2019.19.17.1195>
- [15] J. G. Kim, D. E. Park, The longitudinal effects of theory of implicit intelligence on academic achievement: The mediating effect of grit, *Korean Journal of Educational Psychology*, (2017), Vol.31, No.1, pp.145-162.
DOI: <https://doi.org/10.17286/KJEP.2017.31.1.07>
- [16] S. Y. Han, Exploring the Personal and Social Predictors of the Longitudinal Changes in Grit and Examining the Effects of the Program to Improve Grit, Chungnam National University, Doctoral Dissertation, pp 12-25, (2019)
- [17] K. S. Jeong, The Effects of the Grit Coaching Program on High School Student's School Adaptation and Activity

Competence, Yeungnam University, Doctoral Dissertation, pp 7-19. (2018)

[18] K. S. Jeong, The Effects of the Grit Coaching Program on High School Student's School Adaptation and Activity Competence, Yeungnam University, Doctoral Dissertation, pp 11-21, (2018)

[19] K. S. Jeong, The Effects of the Grit Coaching Program on High School Student's School Adaptation and Activity Competence, Yeungnam University, Doctoral Dissertation, pp 8-15, (2018)