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Research based Article

Increase Optimism of Adolescents Who Experience Nonsuicidal Self-Injury Through Mandala Drawing Activities

Dinsya Arifa¹, Fatma Nofriza², Fitniwilis³

^{1,2,3}, Universitas Muhammadiyah Prof DR. HAMKA, Indonesia

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ABSTRACT

INCREASE OPTIMISM OF ADOLESCENTS WHO EXPERIENCE NONSUICIDAL SELF-INJURY THROUGH MANDALA DRAWING ACTIVITIES. Adolescence is one of the phases with a fairly fluctuating dynamic level of optimism. Adolescents with low levels of optimism are prone to feeling hopeless about hurting themselves. The tendency of adolescents to hurt themselves into a condition called Nonsuicidal Self-Injury (NSSI). An alternative immediate treatment of the condition of students experiencing NSSI with low levels of optimism was tested in this study. Testing using the Pre-Experiment method with the types of One Group Pre Test and Post Test with subjects as many as ten adolescents selected based on purposive sampling technique. The alternative treatment is the drawing mandala activity, a drawing pattern that channels emotions. The analysis used in this study is a test that compares two conditions, namely the Paired Sample T-test. The analysis results show that Mandala drawing activities can increase the level of optimism of adolescents who experience NSSI. Mandala activities can be a medium for immediate handling for NSSI teenagers with low optimism. However, the results of this study need to be tested further on a broader population and with generalizable methods.

KEYWORDS: Non Suicidal Self Injury, Mandala Drawing, Optimism

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INTRODUCTION

One of the reasons an individual can still live his life every day is because he has reasonable expectations that will come to him, often known as optimism. A person with an optimistic attitude is filled with reasonable expectations of himself (Carver, Scheier, & Segerstrom, 2010). Therefore the word optimism has a positive meaning whenever juxtaposed in a sentence. By having optimism, a person will always live his life purposefully because he has a purpose. An optimistic person will indirectly become an individual with deep meaning about his life and a great sense of trust in his abilities in

¹ Corresponding author's address: Program Studi Bimbingan dan Konseling Universitas Muhammadiyah Prof DR. HAMKA : Jl. Tanah Merdeka No. 20, Ciracas, Jakarta, Indonesia. Email: dnsvfa23@gmail.com

various situations. This is because, according to Scheier et al., someone with optimism will have confidence that he will achieve a promising future and make more directed future planning (Scheier, Carver, & Bridges, 2001). Thus, a person with optimism will always have a way to maintain his life well. This is also supported by the statement given by Carver (2010) that someone who has an optimistic attitude will be more confident in facing all kinds of challenges that will occur in his life and will pass them as much as he can try (Carver et al., 2010).

Optimism becomes an essential part of individuals because it will lead individuals to live a good and meaningful life. By having optimism, a person will avoid self-doubt, which is prone to causing psychological or mental disorders. Someone with low optimism is susceptible to psychological disorders such as stress, depression, etc. This is because, according to Alloy et al., an optimistic attitude is contrary to an attitude of hopelessness which is the beginning of symptoms of stress and depression (Alloy et al., 2006). The definition of optimism explained by Scheier is that someone with optimism believes that good things will happen to him in the future. Thus, someone with low optimism, a pessimist, will think otherwise (Scheier et al., 2001). Referring to the opinion of Christopher Peterson, individuals with a good sense of optimism will also have good self-regulation, so they have strong confidence and determination to achieve a goal or face difficulties (Peterson & Peterson, 2000).

Someone who is pessimistic will think he does not deserve something good. A pessimist also tends to have a low self-defense system and happiness (Blasco-Belled, Rogoza, Torrelles-Nadal, & Alsinet, 2022). In addition, he also tends to be confused in living his life so that his life journey is not directed and aimless. This is certainly not a good thing because if it happens in the long run, this will endanger the individual. He will likely be affected by mental disorders. This is supported by the previous statement that someone with a pessimistic attitude will believe more that he will not get good things and will not be able to face various problems in his life in the future. In addition, contrary to an optimistic person, a pessimist will quickly give up on the goals and difficulties he faces (Peterson & Peterson, 2000).

Adolescence is one of the vulnerable developmental periods filled with dynamic levels of optimism. The term adolescence comes from the meaning of the word growing towards maturity, which starts from around the age of 12 or 13 years to the late teens or early twenties (Jahja, 2011). One of the characteristics of adolescence is confusion in psychological or emotional problems. This is more often known as 'labile.' On the other hand, at this time, the influence of the environment outside the family is more substantial, so it is not uncommon for adolescents to experience much confusion. Various conditions experienced by this teenager also indirectly affect the level of optimism he has. His optimism will be easily weakened if the surrounding environment does not support his choice. If this is experienced in the long term, it will endanger the teenager himself psychically, such as vulnerable to depression and even to self-harm.

In the book 'Learned Optimism,' Seligman mentions that an optimist will get many benefits, ranging from a good performance at school and work, and even making them have a longer time to live. Based on this, Seligman also explained in his book that a pessimist is prone to give up, resulting in decreased performance in various conditions, which ultimately leads to depression and makes him vulnerable to ending his life in any way. However, a pessimist can also improve their ability to be optimistic and permanently improve their quality of life (Seligman, 2006). This site is what the

researcher takes as the basis for this study, that a pessimist can still improve himself and become an optimist.

Several studies have proven that optimism can be improved. Research conducted by Menur Pujowati et al. entitled "The Effectiveness of Solution-Focused Brief Group Counseling to Increase the Optimism of Students with Academic Stress" the results of this study shows that the Solution-Focused Brief Group is effective in relieving student academic stress (Pujowati, Wibowo, & Mulawarman, 2022). Furthermore, Ayse Yildiz conducted a study entitled "The Effect of a Psycho-Training Program Designed to Increase Optimism on Secondary School Students," which shows the effectiveness of implementing the Psycho-Training Program in increasing optimism (Yildiz, 2019). Furthermore, there is also research that uses an artistic approach in increasing optimism, namely research conducted by Fazan Nur Wahid and Gatot Jariono on the application of music media in increasing optimism of Lorenza FC football players, just like the two studies mentioned earlier. This study shows that music media can increase optimism in Lorenza FC footballers (Wahid & Jariono, 2022). The three studies mentioned above are enough to be a foundation for researchers that optimism can be increased in various ways, one of which is through art.

Research conducted by Yongqiang et al. found that the level of expectation is related to NSSI or Nonsuicidal Self-Injury behavior (Jiang, Ren, Zhu, & You, 2022). Hope has a close relationship with optimism, so this researcher makes the basis for seeing the relationship between optimism and NSSI actions. NSSI is also known as self-harm or the act of self-harm without the intention to commit suicide. The definition of NSSI given by Matthew K Nnock and Armando R. NSSI is the act of harming one's body parts without intending to commit suicide (Nock, 2009). According to him, NSSI is one way of handling problems that teenagers often do because they do not know other ways to solve them, and no one can be used as a place to complain. According to data from WHO, in 2015 in Indonesia, the number of adolescents who seriously attempted suicide increased compared to 2007, which was 1.4% higher for women and 0.8% for men (UNICEF (United Nations Children's Fund), 2021). From these figures, it is evident that adolescents are vulnerable to NSSI and even intend to do more than that.

From the initial observations that the researcher has made, some junior high school level teenagers aged 13 years have the habit of slashing their wrists with sharp objects. After knowing that, the researcher immediately took them to the Counseling room to be calmed down and also asked several things because when that happened, the researcher was on duty to replace the Counseling teacher at the school. After feeling calmer, they then revealed the reason why they did this. The reason given by all teenagers is the same; namely, they do these actions as a way of venting their stress and sadness. After a brief identification, the researcher concluded that the teenagers did a phenomenon called NSSI because they hurt themselves without suicidality, even though one of the teens said she had attempted suicide several times. The proper treatment for this matter has to be handled by professional experts. However, from the analysis done by researchers, adolescents who experience this problem have obstacles to see experts because of their economic background, while the teenager needs help immediately. Therefore, the researcher wants to find an alternative that can be done and used by Guidance and counseling teachers and school counselors if faced with similar conditions.

The results of research conducted by Nadezdha Yu et al. stated that mandala circle therapy could reduce anxiety levels in adolescents at school and can be applied by

teachers in schools (Kostyunina & Drozdikova-Zaripova, 2016). As it is known that low optimism can also lead to anxiety, so that the two have close conditions. Mandala Therapy or Mandala Art Therapy is one of the therapies through artistic expression that focuses on drawing and coloring in circles. Carl Jung first introduced the concept of this therapy. Mandala comes from Sanskrit, which means a circle. Mandalas are images or shapes drawn spontaneously in a circle (Kostyunina & Drozdikova-Zaripova, 2016).

Mandala coloring activities can be one of the alternative activities that can be used to deal with the mental disorders of an individual. This therapy is also easy and does not require much equipment. Like therapy through other arts, making a mandala that is seen is not aesthetic but rather the meaning of each stroke made in the circle. Carl Jung stated that mandalas are used in complex and complete stages of life (Drob, 2023). By coloring mandalas, a person will feel more awake, get encouragement both from inside and outside himself, treat anxiety and worry, and be aware of the condition he is experiencing at that time (Kostyunina & Drozdikova-Zaripova, 2016). One of the studies using mandala therapy was conducted by Chao Liu et al. regarding the effectiveness of coloring mandalas on Mindfulness, Spiritual, and Subjective Well-being (Liu, Chen, Chiou, & Lin, 2019). The results of the study showed that there was an increase in the variable Subjective Well-being after the application of mandala coloring therapy. According to James E. Maddux, Subjective Well-being includes an attitude of optimism, so this study indirectly explains Mandala coloring therapy's effectiveness in increasing optimism (James E. Maddux, 2018). With the effectiveness and convenience provided by mandala therapy, it is hoped that it will help adolescents who do NSSI because of their low optimism.

RESEARCH METHODS

This study aims to see the effect of mandala circle drawing activities in increasing the optimism of adolescents who experience NSSI. The approach used in this study is the quantitative method. This study uses an experimental design with a type of pre-experimental design, where there is treatment given to subjects, but there is a possibility that outside variables influence the results of this study. This research design is used considering environmental conditions and the time of research used.

This study compared the initial condition before treatment with the condition after being treated in the same group. Before determining the research subject, the researcher first screened all grade 7 students at SMPN 2 Purwakarta, and it was found that 60 students tended to do NSSI. After obtaining data on students who tend to hurt themselves, the researcher conducted preliminary calculations as a pre-test on the level of optimism to select students with a level of optimism at the number ≤ 11 . Furthermore, after all, selected subjects completed the meeting, a post-test was given to determine the level of optimism after treatment.

The place chosen by the researcher to carry out this research is SMPN 2 Purwakarta. This research place is also at the same time where the researcher teaches, so the reason for choosing this place is based on reports about several students who experienced NSSI. The implementation of this research will take place from February to March 2023.

Participants

The population of this study is adolescents who are studying in grade 7 junior high school at SMPN 2 Purwakarta and are identified as tending to do NSSI. After obtaining reports on NSSI students, the researcher conducted a simple screening. Screening is applied to all grade 7 students at SMPN 2 Purwakarta with a secret principle given classically. From the screening results, as many as 60 students were found to tend to hurt themselves intentionally. After the data of students who conducted NSSI were obtained, the researcher measured student optimism using the checklist instrument as an initial or post-test.

Sampling Procedures

The sampling technique in this study is purposive sampling with the following criteria; (1) The last time NSSI was conducted less than a week ago since the screening was given, (2) Have conducted NSSI for more than one year, (3) Have less likely to stop doing NSSI, (4) Get a low score of ≤ 11 on the initial measurement of optimism level, (5) Willing to follow the series of studies. After sampling, 10 participants met these criteria. All participants from the same school, SMPN 2 Purwakarta, were female and aged 12-13 years. All participants have expressed willingness to follow the entire series of research processes.

Procedures

Optimism is a dependent variable, and differences in the level of optimism of adolescents who experience NSSI will be the focus of this study. Meanwhile, the independent variable in this study is mandala drawing activities which are also included in one of the art therapies. Optimism can be the principal capital for adolescents who experience NSSI to leave their habit of self-harm and make them have more explicit life goals. Efforts to increase optimism through mandala drawing activities are carried out to help students who experience NSSI efficiently but still effectively. This activity is very efficient because it only focuses on pouring feelings into a form filled with colorful patterns on paper.

As with the type of experiment used, this study aims to see the effect of mandala drawing activities in increasing the optimism of adolescents who experience NSSI. Therefore, the LOT-R instrument is given before the implementation of the activity to determine the initial level of optimism of the subject. This drawing activity is individual, so the subject can focus on what is and happens within him. The role of the researcher in this activity is as an observer who only gives instructions at the first meeting. The rest of the subjects independently draw their respective mandalas.

At the first meeting, the researcher explained the activities that would be carried out, where the subjects would be asked voluntarily to draw mandalas for as many as four meetings. The researcher also explained the benefits of drawing mandalas to express emotions in his heart and mind. During the activity, the subject is welcome to create a mandala that reflects his mood. The subjects drew using the tools and materials that the researcher provided: HVS paper and 5-color markers. The colors used are red, yellow, green, blue, and brown. The color selection is based on the primary color. The subject was given about 30 minutes in room conditions conducive to drawing the mandala in focus and depth. Each subject drew a mandala four times at a predetermined time together according to the learning schedule at school.



Picture 1. *Mandala depiction of the subject research*

The instrument used by the researcher in this study is an instrument that was compiled by Scheier and Carver in 1994. The instrument used is a revised version containing ten items. The name of this instrument is Life Orientation Test–Revised (LOT – R), which contains three positive statements, three negative statements, and four other statements that represent distraction variables and are not assessed.

The scale used is the Likert scale with weights of 0 (Strongly Disagree), 1 (Disagree), 2 (Neutral), 3 (Agree), and 4 (Strongly Agree). With this scale, the range of values on this instrument is 0 – 24, where the greater the number, the better the level of optimism. On the contrary, the smaller the number obtained, the lower the level of optimism.

In research conducted by Suryadi to update the validity and reliability of the LOT – R instrument using the Rasch model combined with *Confirmatory factor analysis*, the Cronbach α value was obtained at 0.76, which means that this instrument can still be used because it is still relevant to the measured variable. Furthermore, the results of reliability calculations that Suryadi has carried out show that the Indonesian version of the LOT – R instrument gets a reliability value of 0.73, which means that this instrument is still very credible for calculating the difference in high and low levels of optimism (Suryadi, Hayat, & Putra, 2021)

Data Analysis

Differences in the level of optimism of adolescents who experience NSSI will be analyzed using descriptive statistics. Before the data is analyzed, a data normality test is carried out to determine the type of hypothesis test. After it is known that the data is normally distributed, the parametric hypothesis test is chosen as a hypothesis test in this study. The hypothesis test used is the Paired Sample T-test to see the significance value of whether there is a difference in the level of optimism before and after treatment.

RESULTS AND DISCUSSION

The calculation used first is the Descriptive Test to determine the data profile to be analyzed. The data to be presented first is a descriptive analysis of the subjects' optimism level before being given treatment.

Table 1. *Level Of Optimism Before Treatment*

No	Subject initials	LOT-R value
1.	NN	5
2.	AL	9
3.	DA	10

4.	RA	10
5.	JU	10
6.	FE	11
7.	SH	11
8.	KE	10
9.	FR	11
10.	SL	11

The table above shows a low value of optimism because it is less than half the highest value of 24. Further below is a table of values of the subjects' optimism level after being given treatment.

Table 2. *Level Of Optimism After Treatment*

No	Subject initials	LOT-R value
1.	NN	8
2.	AL	15
3.	DA	15
4.	RA	10
5.	JU	11
6.	FE	16
7.	SH	13
8.	KE	11
9.	FR	13
10.	SL	16

From the table above, it is known that there was an increase in optimistic level scores in a number of students, and only one subject did not increase. To facilitate comparison, the following is a presentation of data on the difference in values on the Pre-test and Post-test.

Table 3. *Comparison of Levels Of Optimism Before And After Treatment*

No.	Subject initials	Pre-	Post-	Improvement score
1.	NN	5	8	3
2.	AL	9	15	6
3.	DA	10	15	5
4.	RA	10	10	-
5.	JU	10	11	1
6.	FE	11	16	5
7.	SH	11	13	2
8.	KE	10	11	1
9.	FR	11	13	2
10.	SL	11	16	5

From this data, at least, it can be seen that there is an increase in optimism after being given treatment to the subject. Therefore, to better get accurate results, further testing is carried out. The next test is the normality test, intending to determine whether

the data is typically distributed. The Normality Test used is the Kolmogorov-Smirnov Test and Shapiro Wilk. The results of the normality test can be seen in Table 4.

Table 4. *Normality Test Result*

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest - Post Test	,229	10	,148	,907	10	,262

Data is said to be normally distributed if the significance value is > 0.05 in both the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The calculation results in the table show that the two normality tests show the same results, namely customarily distributed data with a significance of 0.148 on the Kolmogorov Smirnov Test and 0.262 on the Shapiro Wilk Test. Based on the results of the normality test that has been done, the next test used is a parametric test. The parametric test mentioned in the data analysis section is the Paired Sample T-test, whose results can be seen in Table 5.

Table 5. *Descriptive Analysis Of Pre Test And Post Test Data*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre-test	9,80	10	1,814	,573
	post-test	12,80	10	2,741	,867

The table above shows a descriptive analysis of Pre Test and Post Test result data containing the average amount of data, standard deviation, and average standard error. It can be seen from the table above that the mean has increased in the Post-test.

Table 6. *Correlation test results*

		N	Correlation	Sig.
Pair 1	pretest & post-test	10	,639	,047

Table 6 shows a correlation or relationship between Pre Test and Post Test. The number shown in the table shows the number 0.047, which means the significance value is smaller than 0.05, so it can be said that there is a correlation between Pre-test and Post-test data.

Table 7. *Paired T-test result*

		Paired Differences							
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	pre-test - post-test	-3,000	2,108	,667	-4,508	-1,492	-4,500	9	,001

The data in Table 7 shows a 2-tailed significance number of 0.001 which is less than 0.05, so it can be said that the hypothesis is accepted. So it can be concluded that there are differences in students' optimism levels before and after participating in mandala drawing activities. The results of this analysis are in line with research conducted by Hyejin Kim et al. on the effect of mandala therapy on subjective well-being, hope, and resilience in psychiatric inpatients, which shows the results that activities or therapy by

drawing mandalas provide a positive influence, especially on the variable of hope (Kim, Kim, Choe, & Kim, 2018).

CONCLUSION

Based on the analysis results obtained, the 2-tailed significance number of the parametric test Post test Pre-test shows several 0.001, where any significance less than 0.05 is considered to support the hypothesis that there is a difference between the condition before and after treatment. In this case, it means that the mandala drawing activity has a positive effect in increasing optimism. Through the results of this study, the purpose of this study has also been achieved, namely, to see the effect of mandala activities in increasing NSSI adolescents' optimism. Mandala activities are proven to increase optimism reasonably quickly but still effectively.

The results of this study can be used as a reference and basis for the use of alternative mandala drawing activities as an initial treatment for adolescents, especially students in schools experiencing NSSI. The results of this study can be a reference for future researchers in developing responsive and immediate handling media for any conditions related to adolescent mental health, especially in the school environment. In addition, this research can also be a scientific literature that becomes a validation tool that mental health issues need more attention in the school environment and by all parties.

Of course, this research did not take place without obstacles and difficulties. Because the type of research used is pre-experimental, the study results may be influenced by other variables that are not research variables. So the suggestion for further researchers is to be able to conduct research with a more rigorous type of experiment.

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