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ISSN: 0193-4120 Page No. 10346 - 10351

The Analysis and Test of the Effectiveness of Resilience Module (MR) in Improving Counselors' Skills to Increase Student Resilience Post-disaster

Daharnis Daharnis[1], Ifdil Ifdil[2], Taufik Taufik[3], Afdal Afdal[4]
[1234]Department Guidance and Counseling, Faculty of Education, Universitas Negeri Padang, Padang, West Sumatera, Indonesia
Email: daharnis@konselor.org

Article Info
Volume 83
Page Number: 10346 - 10351
Publication Issue:
March - April 2020

Article History
Article Received*: 24 July 2019*
Revised*: 12 September 2019*
Accepted*: 15 February 2020*
Publication*: 13 April 2020*

Abstract:

The purpose of this study is to analyzed of effectiveness of Resilience Module (MR) in improving Counselors' Skills to increase student resilience post-disaster. This is quasi-experiment research with data obtained from 15 counselors divided into one group pretest and posttest designs using the Training Session Instrument (TRI-1). The results showed the following 1) the counselors' level of knowledge and skills before the resilience module training were in the low category, 2) their knowledge and skills were in high category after the resilience module training, and 3) there is a significant difference between their skills before and after the training. Therefore, training by using resilience module is effective in improving counselors' skills and student's resilience during post-disaster. In conclusion, counselors need to be trained to use resilience module in an effort to increase student's resilience in areas potentially affected by natural and other forms of disasters.

Keywords: resilience, module, counselor, counseling, post-disaster

I. Introduction

West Sumatera is one of the regions in Indonesia potential to a natural disaster [1-2]. A large percentage of this region consists of hills crossed by fragment zone, thereby, making this region potential to disasters [3]. Flood, wind, slide, earthquake, great wave, and tsunami are some of the common natural disasters found in this region [4-5]. There are two possibilities to the existence of natural disaster. Firstly, it emerges from earth deep which is unpredictable by humans. Secondly, it manifests due to humans ignorant attitude to the world [6-7].
Natural disaster leads to death, pains, financial loss, damage to the environment and public infrastructure, as well as stimulate the disturbance to life and the livelihood of humans [8-9]. Natural disaster affects humans physically, and psychologically [10-11]. In addition, the negative effect of disaster leads to psychology disturbance, depression, stress and trauma in the society [12].
The effect of disaster encountered by humans stimulates and influence their readiness for subsequent occurrence [13-14]. It provides a learning process beneficial to an individual's readiness attitude [15]. According to [16], this process has the ability to minimize the psychological impact of the disaster from a victim. This attitude, which also known as

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resilience, is also supported by individual ability to recover from trauma [12].

Resilience is a successful ability to conduct self-adaptation irrespective of the underlying pressure [17-18]. Self-adaptation is the capacity to build positive result in life phenomenon due to pressure [19]. Self-adaptation is the process of constructing defense energy and keeping the limit between positive-negative emotional levels which determines a person's underlying ability [20]. Its success illustrates a person's capacity to recover quickly from stress or the environment [21].

It is important to increase and develop students resilience module. The geographical condition of West Sumatera Province located in Sumatera Beach, and between Asia and Australia has huge potential to earthquake [17]. At the Indonesia zone, the Province consists of 5 to 10 districts potential to natural disasters, and when this happens, it leads to the psychological disturbance of the society [22].

The importance of improving students resilience is due to their ability to acquire knowledge faster as teenagers [17, 23]. According to [24], teenagers are frequently disturbed by bad past events while growing. Some of this disturbing events are disaster, therefore, it is important to improve their resilience, especially while in school [25-26], and [27]. Therefore, this research aims to analyze of the effectiveness of Resilience Module (MR) in improving Counselors' Skills to increase student resilience post-disaster.

II. Method

This is a quasi-experiment research consisting of the one group pretest and posttest design [28]. The purposive sampling technique was used to obtain data from 15 school counselors in West Sumatera, using the Training Session Instrument (TRI. 1) [29-30]. The descriptive analysis, was used to describe the counselors' skill level before and after training and to determine the deferential analysis [31], and [32].

III. Results and Discussion

The Description of Knowledge Levels of School Counselors before Training

Knowledge levels of schoolccounselors' before the resilience training module is shown in table 1.

Table 1:Knowledge Levels of school counselors' before Training

Respondent Code	Before *Score*	*Category*
R.6	28	Middle
R.13	16	Low
R.8	13	Low
R.14	17	Low
R.5	27	Middle
R.1	31	Middle
R.3	35	Middle
R.15	29	Middle
R.12	36	Middle
R.9	24	Middle
R.4	26	Middle
R.2	33	Middle
R.7	37	Middle
R.11	39	High
R.10	39	High

Table 1 shows the knowledge scores of each counselor before following the resilience training module. A total of 1, 12 and 2 counselors were in the middle, low, and high categories, as shown in figure 1.

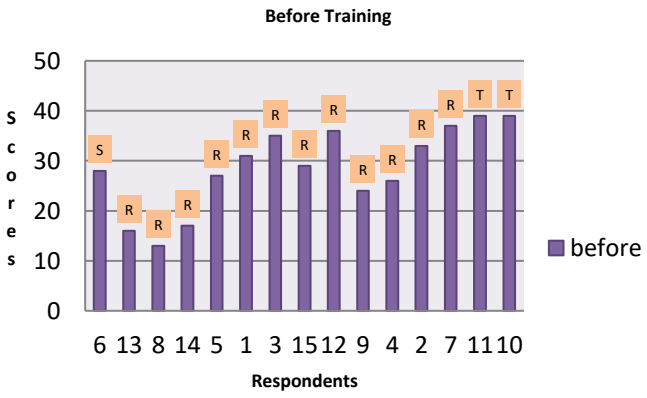

Fig 1: Knowledge levels of Counselors before Training

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The frequency of knowledge levels of counselors' before following resilience training module is shown in table 2.

Table 2: Distribution Frequency of Knowledge Levels of Counselors' before Training

Category	Knowledge Levels of Counselors	
	Frequency	Percentage (%)
High	2	13.3
Middle	1	6.7
Low	12	80
Total	15	100

The knowledge of Counselors before conducting resilience training module in the high, middle and low category were 13,3%, 6,7% and 80%, respectively. Therefore, a greater percentage were in the low category.

This result showed that the comprehension of counselors on resilience module in improving student's post-disaster abilities was high at 93, 3%. It indicated that the comprehension of counselors on resilience module is in the high category. Previous observation (pre-research) showed that counselors in West Sumatera still have less resilience, while the Province is susceptible and potentially attacked by disaster. According to [33], this region is often associated with disasters such as flood, slide, and earthquake. These automatically affect the victims, either physically or psychologically [8]. The effect of disaster also leads to psychological disturbance, depression, stress, and trauma in society [17].

Therefore, the above information obtained after the resilience module was administered to improve student's resilience post-disaster, which was enhanced from low to high knowledge. However, based on those explanations, it can be concluded that this resilience module was enabled to develop comprehension of Counselors.

The Description of Counselors Knowledge after Training

The knowledge levels of school counselors after receiving resilience training module were measured as shown in table 3.

Table 3: Knowledge Scores of School Counselors' after Training

Code	Knowledge Scores of school CounselorsAfter Receiving Training			
	Score	*Category*	*Mean*	*Category*
R.6	36	Middle	3.6	Middle
R.13	43	High	4.84	High
R.8	48	High		
R.14	48	High		
R.5	45	High		
R.1	48	High		
R.3	48	High		
R.15	49	High		
R.12	49	High		
R.9	50	High		
R.4	50	High		
R.2	50	High		
R.7	50	High		
R.11	49	High		
R.10	50	High		

Table 3 shows that after training was administered, 1, 14 and no school counselors' are in the middle, high and low categories.

The conditions of each knowledge levels of school counselors' after receiving resilience training module are shown in figure 2.

The frequency on knowledge level of school counselors' after receiving resilience training module is shown in table 4.

Table 4, shows that the frequency knowledge levels of school counselors' after receiving resilience training module were 93,3%, 6,7%, and 80%, in the high, middle and low categories, respectively. Therefore, it indicated that Knowledge Levels of school counselors after receiving resilience training module is in the high category.

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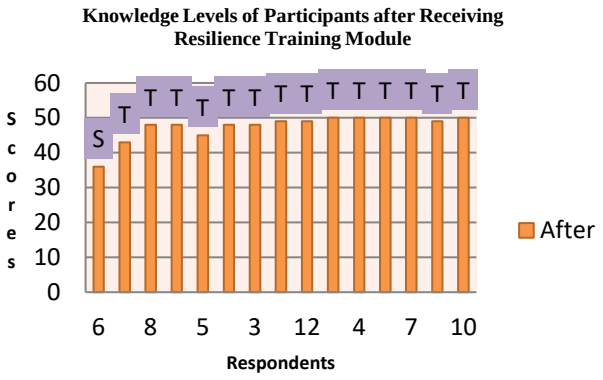

Fig 2: Knowledge levels of school counselors' after Training

Table 4: Frequency Distribution of Knowledge Levels of school counselors after training

Category	Knowledge Levels of school counselors	
	Frequency	*Percentage (%)*
High	14	93.3
Middle	1	6.7
Total	15	100

Identification of the Difference Knowledge Among school counsellors before and after Training

The statistical analysis technique used the Wilcoxon's Signed Ranks Testthrough SPSS version 20.0 computer program to identify the difference knowledge among schoolccounselors' before (pretest) and after(posttest)as shown in table 5.

Table 5: Result of Analysis Wicoxon's Signed Ranks Test on the Difference Knowledge among-school counselors in Pretest and Posttest

Test Statistics	
	After–Before
Z	-3.411[b]
Asymp. Sig. (2-tailed)	.001
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Table 5 shows that the probability scores of Asmyp. Sig. (2-tailed), and level of knowledge among school counselors was 0, and under alpha 0,05 (0,001< 0,05). Therefore, there was a significant difference in the level of school counselors before (pretest) and after (posttest).
Furthermore, the differing distance between pretest or posttest scores are shown in table 6.

Table 6: The Distance of Pretest or Posttest on the Knowledge level of school counselors in Resilience Training Module

Ranks				
		N	**Mean Rank**	**Sum of Ranks**
After–Before	Negative Ranks	0[a]	.00	.00
	Positive Ranks	15[b]	8.00	120.00
	Ties	0[c]		
	Total	15		

a. Knowledge Level of school counselorsAfter receiving Training <Knowledge Levels of school counselorsBefore receiving Training
b. Knowledge Level of school counselorsAfter receiving Training > Knowledge Level of school counselorsBefore receiving Training
c. Knowledge Level of school counselorsAfter receiving Training = Knowledge Level of school counselorsBefore receiving Training

Table 6 shows a total of school counselorswere enhanced after receiving resilience training module. The table further showed Positive Ranks of 15bscore which mean that all school counselorshad higher knowledge level after receiving training. Based on statistic testing analysis using wilcoxon sig rank test there is a significant difference in knowledge level of school counselorsbefore and after receiving training.

IV. Conclusion

In conclusion, training with the use of resilience module is effective in improving the knowledge of schoolccounselors' on student's resilience during

post-disaster. This study recommends the need for training in school counselorsusing resilience module to develop student's resilience post-disaster to potential territory attacked by natural disasters.

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